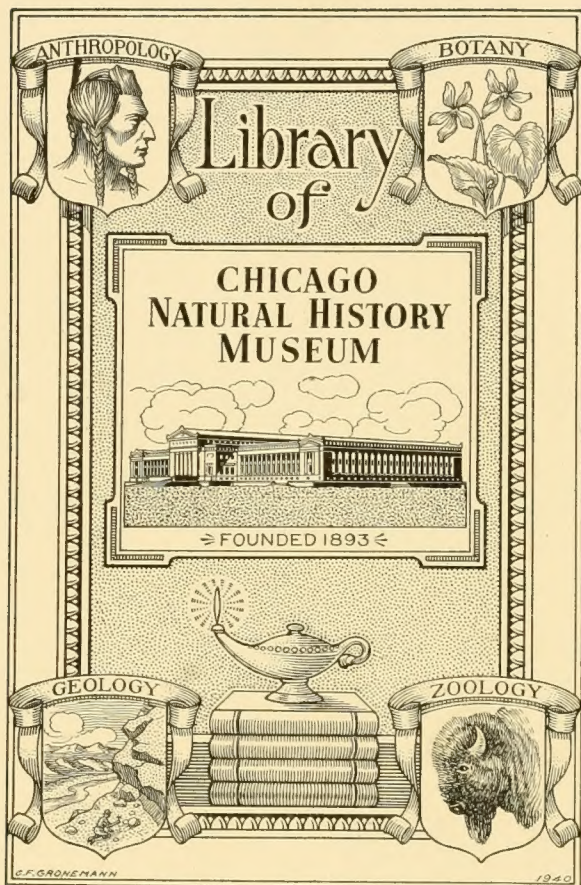




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INSTITUTE OF SOCIAL ANTHROPOLOGY
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NOMADS OF THE LONG BOW

THE SIRIONO OF EASTERN BOLIVIA

by

ALLAN R. HOLMBERG

*Prepared in Cooperation with the United States Department of
State as a Project of the Interdepartmental Committee
on Scientific and Cultural Cooperation*



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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
INSTITUTE OF SOCIAL ANTHROPOLOGY,
Washington 25, D. C., June 21, 1948.

SIR: I have the honor to transmit herewith a manuscript entitled "Nomads of the Long Bow: The Siriono of Eastern Bolivia," by Allan R. Holmberg, and to recommend that it be published as Publication Number 10 of the Institute of Social Anthropology.

Very respectfully yours,

GEORGE M. FOSTER, *Director.*

DR. ALEXANDER WETMORE,
Secretary of the Smithsonian Institution.



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PHONETIC NOTE

In the pronouncing and writing of native words, vowels and consonants have Spanish values. Exceptions to this are the following:

č=*ch* as in *chair*.

g=*g* as in *go*.

h=*h* as in *hat*.

ǵ=*j* as in *joke*.

k=*k* as in *keep*.

N=*ng* as in *sing*.

š=*sh* as in *shop*.

w=*w* as in *want*.

z=*z* as in *zone*.

Nomads of the Long Bow

The Siriono of Eastern Bolivia

By ALLAN R. HOLMBERG

INTRODUCTION

This study¹ was carried out under the auspices of the Social Science Research Council, of which I was a predoctoral fellow in 1940-41. It had its origin in 1939, when I was associated with the Cross-Cultural Survey at the Institute of Human Relations, Yale University. While studying there, I was privileged to get considerable exposure to the cross-disciplinary approach to the problems of culture and behavior which was, and still is, being emphasized at the Institute, especially by Drs. Murdock, Hull, Dollard, Miller, Ford, and Whiting.

As I continued my anthropological studies, it became more and more apparent to me, as to others, that a science of culture and behavior was most apt to arise from the application of techniques, methods, and approaches of several scientific disciplines concerned with human behavior—particularly social anthropology, sociology, psychology, and psychoanalysis—to specific problems. Consequently, in casting around for a subject on which to carry out field work, I began to search for one that would be especially adaptable to cross-disciplinary treatment.

While studying at the Institute of Human Relations, I became keenly aware of the significant role played by such basic drives as hunger, thirst, pain, and sex, in forming, instilling, and changing habits. Because of the difficulty of studying human behavior under laboratory conditions, our knowledge about the processes of learning has been derived largely from experimental studies of animals. However, the procedure, successfully employed in psychological experimentation, of depriving animals of food suggested that it might

be possible to gain further insight into the relationship between the principles of learning and cultural forms and processes by studying a group of perennially hungry human beings. It was logical to assume that where the conditions of a sparse and insecure food supply exist in human society the frustrations and anxieties centering around the drive of hunger should have significant repercussions on behavior and on cultural forms themselves. Hence, I took as my general problem the investigation of the relation between the economic aspect and other aspects of culture in a society functioning under conditions of a sparse and insecure food supply. More specifically, the problem resolved itself into determining, if possible, the effect of a more or less constant frustration of the hunger drive on such cultural forms as diet, food taboos, eating habits, dreams, antagonisms, magic, religion, and sex relations, and upon such cultural processes as integration, mobility, socialization, education, and change.

In our own society there are many individuals who suffer from lack of food, but one rarely finds hunger as a group phenomenon. For this reason a primitive society, the Siriono of eastern Bolivia, was chosen for study. The Siriono were selected for several reasons. In the first place, they were reported to be seminomadic and to suffer from lack of food. In the second place, they were known to be a functioning society. In the third place, the conditions for study among them seemed favorable, since it was possible to make contact with the primitive bands roaming in the forest through an Indian school which had been established by the Bolivian Government in 1937 for those Siriono who had come out of the forest and abandoned aboriginal life.

¹ The data in slightly different form were presented to the Graduate School of Yale University in partial fulfillment for the degree of doctor of philosophy.

I left for Bolivia on September 28, 1940, and arrived in the field on November 28, 1940. Between November 28, 1940, and May 17, 1941, I worked with informants of various bands of Siriono who had been gathered together in a Bolivian Government Indian school at Casarabe, a kind of mixed village of Indians and Bolivians, situated about 40 miles east of Trinidad, capital of the Department of the Beni. At the time of my stay this so-called school had a population of about 325 Indians.

Following my residence in Casarabe, where I became grounded in the Indian language and those aspects of the aboriginal culture that still persisted there, I left in May 1941, to join a band of about 60 Siriono who were living under somewhat more primitive conditions near the Rio Blanco on a cocoa plantation, called Chiquiguani, which was at that time a kind of branch of the above-mentioned school. Upon arriving at Chiquiguani, however, I found that as a result of altercations with the Bolivians, the Indians had dispersed into the forest, and so I encountered no people with whom to work. Consequently, I returned to a ranch near the village of El Carmen. There I was fortunate in meeting an American cattle rancher, Frederick Park Richards, since deceased, who had resided in the area for many years and who had a number of Siriono living on his farm and cattle ranch. Through him I was presented to a Bolivian, Luis Silva Sánchez, a first-rate bushman and explorer for the aforementioned school, who offered to be my companion and who stayed with me during most of the time that I lived and wandered with the Siriono. In company with Silva I set out in search of the Indians who had dispersed into the forest. After about 10 days they were located, and they agreed to settle on the banks of the Rio Blanco, about 2 or 3 days' journey up the river by canoe from the village of El Carmen, at a place which we founded and named Tibaera, the Indian word for assaí palm, the site being so designated because of the abundance of this tree found there. I spent from July 15 to August 28, 1941, at Tibaera, continuing my general cultural and linguistic studies, but under what I regarded as unsatisfactory conditions, since I had previously laid my plans and devoted my energies to acquiring techniques for observing a group of Siriono who had had little or no previous contact. Conse-

quently, I suggested to Silva that we go in search of other Indians. Finally, on August 28, 1941, I set out from Tibaera, in company with Silva and parts of two extended families of Indians (21 people in all), traveling east and south through the raw bush in the general direction of the Franciscan Missions of Guarayos, where we were told by the Indians that we might locate another band who had had little or no previous contact. After 8 days of rough travel, much of which involved passing through swamps and through an area which had long been abandoned by the Siriono, we joyously arrived at a section of high ground containing relatively recent remains of a Siriono camp site. My Indian companions told me that this site had been occupied by a small number of Indians who had come there in quest of calabashes about three "moons" earlier.

Inspired by the hope of soon locating a primitive band, we silenced our guns and lived by hunting with the bow and arrow so as not to frighten any Indians that might be within earshot of a gun. We followed the rude trails which had been made by the Indians about 3 months earlier, and after passing many abandoned huts, each one newer than the last, we finally arrived at midday on the eleventh day of march just outside of a village. On the advice of our Indian companions, Silva and I removed most of our clothes, so as not to be too conspicuous in the otherwise naked party—I at least had quite a tan—and leaving behind our guns and all supplies except a couple of baskets of roast peccary meat, which we were saving as a peace gesture, we sandwiched ourselves in between our Indian guides and made a hasty entrance into the communal hut. The occupants, who were enjoying a midday siesta, were so taken by surprise that we were able to start talking to them in their own language before they could grasp their weapons or flee. Moreover, as their interest almost immediately settled on the baskets of peccary meat, we felt secure within a few moments' time and sent back for the rest of our supplies.

Once having established contact with such a group, I had intended to settle down or wander with them for several months, or until I could complete my studies. I was forced, however, to abandon this plan when, after being with them for a day or two, I came down with an infection in my eyes of such gravity that I was almost blinded. Fearing that this infection would spread to a point

that might cause the loss of my sight, and since I carried no medicines with which to heal it, I decided to set out for the Franciscan Missions of the Guaranos, about 8 days' distance on foot, the nearest point at which aid could be obtained. Before leaving, however, I consulted with the chief of this new group (his name was Ačíba-eóko or Long-arm) and told him that I planned to return and study the manner of life of his people. In the meantime, the Indians in our original party, knowing of my plan, had already convinced the chief and other members of his band to return with them to the Rio Blanco and settle down for a while at Tibaera, a plan which suited me perfectly. Consequently, in the company of four Indians of this new band and Silva, I traveled on foot to Yaguarú, Guaranos. After about 2 weeks of fine treatment at the hands of the civilian administrator, Don Francisco Materna, and the equally hospitable Franciscan fathers and nuns, I was able to rejoin the band, and we slowly returned to Tibaera, arriving there on October 11, 1941.

Besides what studies I was able to make of this band while roaming with them during part of September and October, 1941, I continued to live with them at Tibaera, except for occasional periods of 10 days' or 2 weeks' absence for purposes of curing myself of one tropical malady or another or of refreshing my mental state, until March 1942, when my studies were terminated by news that the United States had become involved in war 3 months previously.

As can be readily inferred from the account given above of my contacts with the Siriono, they were studied under three different conditions: first, for about 4 months, while they were living at Casarabe under conditions of acculturation and forced labor; second, for about 2 months, while they were wandering under aboriginal conditions in the forest; finally, for about 6 months, while they were living at Tibaera, where aboriginal conditions had not appreciably changed except for the introduction of more agriculture and some iron tools. During the course of my work, I made a complete ethnological survey of the culture, only part of which can be published here, although my attention was focused primarily on the problem of the sparse and insecure food supply and its relation to the culture. As my knowledge of the language and culture increased, I was constantly

formulating, testing, and reformulating hypotheses with respect to this problem.

Since Siriono society is a functioning one, three fundamental methods of gathering field data were employed: (1) the use of informants, (2) the recording of observations, and (3) the conducting of experiments. The first two methods were followed throughout the course of the work. Experiments, such as the introduction of food plants and animals, were performed during the latter part of the study, although the extensive use of this method was limited by the termination of the research.

The application of the above field methods was facilitated by the use of various techniques of which the following were the principal ones: (1) the use of the language of the people studied and (2) the participation of the ethnographer in the cultural life of the tribe.

When possible, data were recorded on the spot in an ethnographic journal, which was supplemented by a record of personal experiences while in the field. As the group was small, everyone was used as an informant, and since most of the activities of the Siriono center in but one hut, data on the behavior patterns of almost everyone could be recorded. No paid informants were used, although gifts such as bush knives and beads were given. No Siriono was a willing informant; little information was volunteered, and some was consciously withheld. Had it not been for the fact that I possessed a shotgun and medicines, life with the Indians would have been impossible. By contributing to the food supply and curing the sick, I became enough of an asset to them to be tolerated for the period of my residence.

At the time of leaving the field (I had not finished my studies) I did not feel satisfied that I had gained a profound insight into Siriono culture. True, I had studied the language to the extent that I could carry on a fairly lively conversation with the Indians, but the time spent in satisfying my own basic needs—acquiring enough food to eat, avoiding the omnipresent insect pests, trying to keep a fresh shift of clothes, reducing those mental anxieties that accompany solitude in a hostile world, and obtaining sufficient rest in a fatiguing climate where one is active most of the day—often physically prevented me from keeping as full a record of native life as I might have kept had I been observing more sedentary informants

under less trying conditions. However, if I have contributed something to an understanding of these elusive but rapidly disappearing Indians, I shall feel more than satisfied.

This study would have been impossible without the help of many friends and various institutions. I am deeply indebted to the Social Science Research Council for providing the funds to carry out the field work; to Yale University (through the efforts of Dr. Cornelius Osgood) for granting me a Sterling Fellowship to write up the field data; and to the Smithsonian Institution for publication of the manuscript.

To my teachers at Yale University I owe a profound debt of gratitude, especially to Dr. G. P. Murdock, who has been a friendly adviser since the beginning of the study. Dr. Murdock spent many hours patiently reading, criticizing, and editing much of the original manuscript. While living with the Siriono, I also had the benefit of his counsel, together with that of the late Dr. Bronislaw Malinowski, Dr. Clark Hull, and Dr. John Dollard, all of whom formed an advisory committee at Yale. These gentlemen were largely responsible for developing my interest in certain problems of this research, and all of them sent me many stimulating letters of advice and criticism while I was in the field. None of them is responsible for any of its defects.

I wish to express my deepest appreciation to Dr. Alfred Métraux. It was he who was largely responsible for crystallizing my interest in the South American Indian and for my selection of the Siriono among whom to work. Dr. Métraux took a keen interest in this study from its inception and gave me constant encouragement while I was in the field. An invaluable service was also rendered by Dr. Wendell C. Bennett, who acted in an advisory capacity when I started to write up my field notes, and by Dr. Clellan S.

Ford and Dr. John W. M. Whiting, who made many helpful suggestions and criticisms while I was preparing the manuscript. To my wife, Laura, goes the credit for patiently typing and retyping the manuscript.

While I was in Bolivia, many people helped me in the pursuit of my studies. I wish to express my thanks especially to Dr. Gustav Otero, of La Paz, then Minister of Education, for providing me with a letter of introduction to the Director of the Núcleo Indigenal de Casarabe; to Don Carlos Loayza Beltrán, then Director of the Núcleo, and Horacio Salas, then Secretary of the Núcleo, for several months of friendly hospitality; to Senator Napoleón Solares A., of La Paz, and Don Adolfo Leigue, of Trinidad, for comfortably sheltering me in the Casa Suárez in Trinidad, Beni.

My life with the Indians at Tibaera was made possible through the valiant cooperation of Don Luis Silva Sánchez, of Santa Cruz de la Sierra. Nothing I can say will express the gratitude I feel for this fearless Cruzeño who accompanied me for more than 6 months in the field under the most trying conditions. Had it not been for Silva, in fact, my life with the Siriono under aboriginal conditions would have been unbearable.

I am deeply grateful to the late Frederick Park Richards of El Carmen for his bounteous hospitality and for generously providing me with the food and the mobility without which it would have been impossible to carry out my studies. I also wish to express my thanks to Don René Rousseau of Baures and Dr. and Mrs. Lothar Hepner, then of Magdalena, for many days of friendly hospitality and cordial companionship.

Finally, I should like to express my appreciation to the Siriono who, for the first time in their history, tolerated a naive but inquisitive anthropologist on his first extended stay in the field.

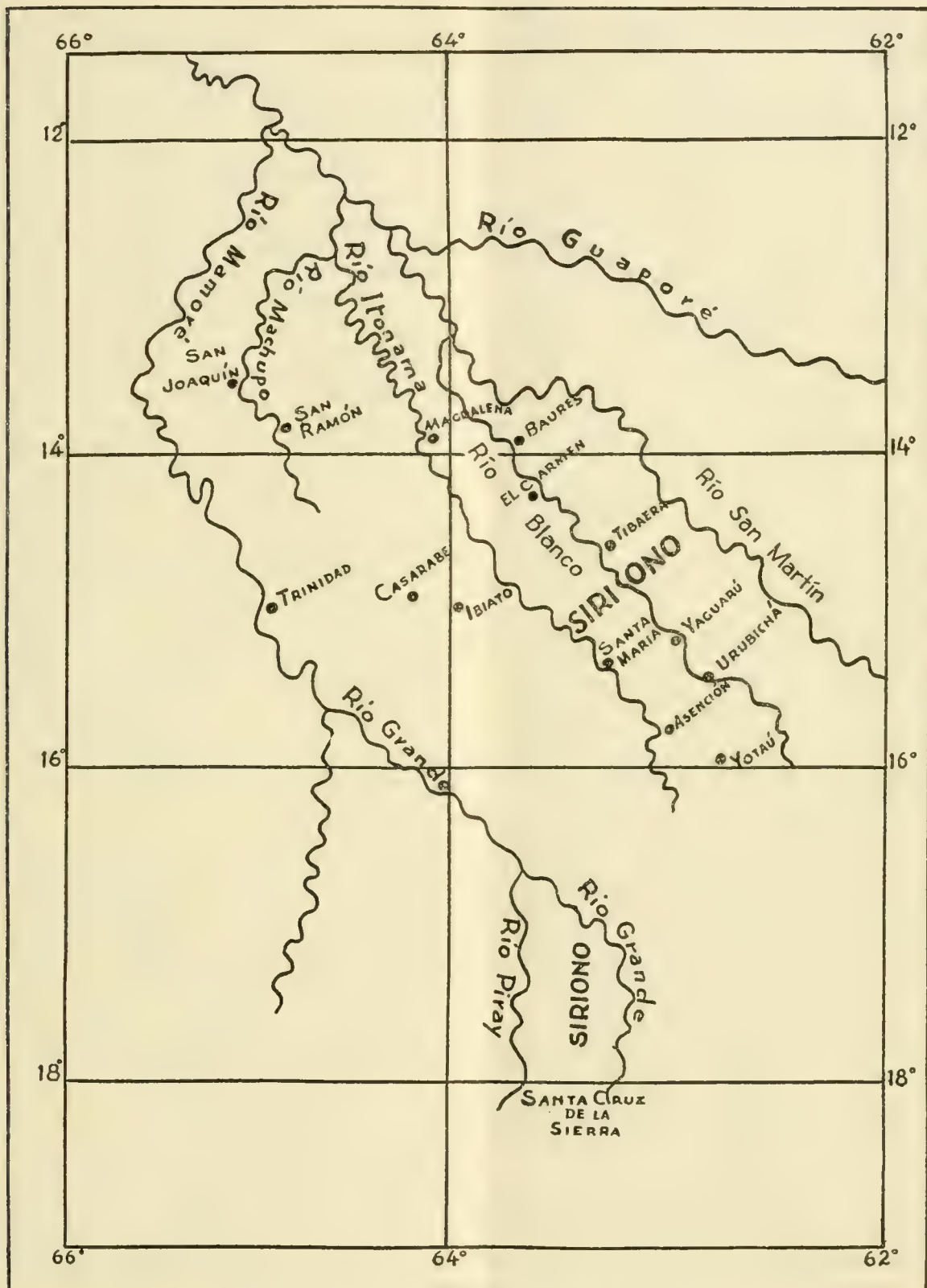
SETTING AND PEOPLE

The Siriono are a group of seminomadic aborigines inhabiting an extensive tropical forest area, of about 200 miles square, between latitudes 13° and 17° S. and longitudes 63° and 65° W., in northern and eastern Bolivia. The name applied to these Indians is not of their own origin.² They

refer to themselves simply as *mbía* or "people." But as they have been called Siriono since first contact, and have been thus designated in the literature, I shall adopt the term.

The area of Bolivia inhabited by the Siriono is situated in the Departments of the Beni and Santa Cruz. It is roughly bounded on the north by the island forests, lying just south of the villages of Magdalena, Huacaraje, and Baures; on

² The origin of the name Siriono is unknown. Wegner (1934 b) has suggested that it came from the Siriono word *siri*, meaning "chonta palm," but there is no such suffix as *ono* in the Siriono language and the Indians are unacquainted with the name applied to them.



MAP 1.—Territory occupied by the Siriono in eastern Bolivia.

the south, by the Franciscan Missions of Guarayos; on the east, by the Rio San Martín; and on the west, by the Rio Grande and Rio Mamoré. Within this extensive area the Siriono have lived and wandered in isolated pockets since the first European contact with them in 1693.

Until the 1930's, a great many Siriono were living in the island forests of the Mojos plains east of Trinidad and between the Rio Grande and Rio Piráy, but now most of these have become acculturated and are living under conditions of almost forced labor on cattle ranches, farms, schools, and missions near Trinidad, Magdalena, Baures, El Carmen, Guarayos, and Santa Cruz. Actually, almost the only unacculturated Siriono extant today are those occupying the forest country southeast of the village of El Carmen. Here, east of the banks of the upper Rio Blanco, is located a range of hills, locally known as the Cerro Blanco, near which wander a few groups of Siriono, who have as yet been unmolested by white contact. There may also still be some living between the Rio Grande and Rio Piráy, but these have not been seen by me.

The region occupied by the Siriono is characterized by a tropical climate with two seasons, the wet and the dry. The former lasts from November to May; the latter from May to November. The annual mean temperature (no records available) runs around 73° F., with extremes of 50° F. during the cold south winds from Tierra del Fuego and 110° F. during the heat of the average day. During the rainy season the climate is very hot and moist, with rains on the average of every other day; during the dry season the extreme heat of the day is tempered by cooler nights and occasional cold wind storms from the south. These "sures," as they are called by the Spanish-speaking natives of the region, are usually accompanied by rain and a very sudden drop in temperature. They generally last about 4 days and occur at average intervals of 15 days during April, May, and June. The prevailing winds, however, are from the north. The average rainfall is about 100 inches per year.

Geographically speaking, the Siriono country is situated in the eastern part of the vast plain, partly forested and partly pampa, lying between the Andes on the west and the Mato Grosso Plateau on the east. From south to north, this plain extends from the hill country north of the Gran Chaco to the low unexplored hills of Brazil

which lie just north of the Rio Guaporé. Within this area, from the Rio Blanco west to the Rio Mamoré, are located the extensive llanos of Mojos dotted with the island forests once occupied by the Siriono. East of the Rio Blanco, however, between the Rio Guaporé on the north and the Franciscan Missions of Guarayos on the south, is a vast and dense forest plain which runs for hundreds of miles, and within which the few extant Siriono still wander today. This plain contains occasional low ranges of hills, which are part of the same chain that runs into Brazil on the north and into the Chiquitos region of Bolivia on the south.

Except for the above-mentioned hills, the area generally is flat and only about 500 feet above sea level. Both the pampas and the forests are characterized by *alturas*—high lands that do not flood during the rainy season—and *bajuras*—low lands that do flood in the rainy season. The *alturas* are characterized by a resistant capping of partially decomposed lava, containing a top soil of coarse sand with occasional outcroppings of igneous rock. In elevation they lie some 75 feet above the *bajuras*, which are made up of a heavy clayey top soil and which are flooded during most of the rainy season. The *alturas* of the forest are considered to be the richest agricultural lands, while the *bajuras* of the pampa, since water stands in many of them the year around, are suitable for little more than grazing.

The outstanding watershed features of the region are its numerous lakes and rivers. Of the former there are some 20 large ones in the Siriono country known to me, but which have not been named as yet. Around all of these lakes are extensive flood lands, and stemming from each are brooks or *arroyos* which drain into other lakes or into the principal rivers of the area, the Rio San Martín, the Rio San Joaquín, the Rio Negro, the Rio Blanco, Rio Itonama (San Miguel or San Pablo), and the Rio Machupo. All of these rivers flow into the Guaporé (Itenez) before it joins the Mamoré (Madeira) in its route to the Amazon. The southwestern part of the area is drained by the Rio Piráy and Rio Grande, which also flow into the Mamoré. Although the rivers are numerous and of good size, the area in general is poorly drained; from the air during the rainy season it has somewhat the appearance of a huge swamp within which there are islands of high

ground. All of the rivers follow very capricious courses and are of great age.

The environment, so far as is known, contains no mineral deposits of note. Gold has been reported from the region of the Cerro Blanco—which might be expected in view of the fact that gold is mined in the Chiquitos region to the south and has been mined in the Cerro San Simón to the north—but no deposits of significance have ever been worked. Stone is unknown in Mojos, although a poor grade of igneous rock is found along the Rio Itenez and the Rio Blanco. In the entire region there is no salt, coal, or petroleum.

Present in the area, but not in the abundance that most people are wont to imagine they exist in tropical forests, are the most common types of Amazon Valley fauna. The principal mammals are the tapir, jaguar, puma, capybara, deer, peccary, paca, coati, agouti, monkey, armadillo, anteater, opossum, otter, and squirrel. Bats are a perennial pest.

Land and waterfowl are numerous. The king of these birds is the harpy eagle. Likewise present, and in greater numbers, are the king vulture and the black vulture, which are almost always seen high in the sky gliding like planes in search of carrion. Game fowl are also plentiful, especially the curassow, guan, wild duck, macaw, toucan, partridge, egret, cormorant, hawk, pelican, plover, kingfisher, trumpeter, spoonbill, and parrot. On the pampa one also frequently encounters the South American ostrich and varieties of ibis.

Of the reptiles, alligators and tortoises are plentiful. Occasionally one sees a *tegu* or an iguana. More rarely encountered are snakes, including the anaconda, the fer-de-lance, the bushmaster, the rattler, and coral snakes.

The rivers and lakes of the area are well stocked with fish. Among the principal kinds are the palometa, the pacú, the parapatinga, the tucunaré, several kinds of catfish, and the sting ray. Also present but rarely caught is the pirarucú, the largest bony fresh-water fish in the world. Not infrequently seen sporting in the lakes and rivers are schools of fresh-water porpoises, which may come so close as to upset one's canoe when traveling by water. There are few shellfish and mollusks in these inland waters.

Only one who has traveled in the region can appreciate the myriad forms of insect life that

harass the inhabitants. Since a great part of the country is swamp for at least 6 months of the year, mosquitoes of all kinds (and of which the area is never free) can breed unhampered, and, as night falls, these insects, together with gnats and moths, descend upon one by the thousands. During the day, when these pests retire to the swamps and the depths of the forest, their place is taken by innumerable varieties of deer flies and stinging wasps. When traveling by water during the day, one is also perennially pestered by tiny flies which settle on the uncovered parts of one's body by the hundreds and leave minute welts of blood where they sting.

No less molesting are the ants, most of which are stinging varieties. The traveler in the forest soon learns what kinds to avoid. Especially unpleasant are those which inhabit the tree called palo santo, the sting of a few of which will leave one with a fever, and the *tucondera*, an ant about an inch in length whose bite causes partial paralysis for an hour or two.

In addition to the ants, mosquitoes, and flies, there are scorpions and spiders whose bites may also cause partial paralysis and for whose presence one must be continually on the lookout, and sweat bees, which drive the perspiring traveler to a fury in trying to escape them. Some mention should also be made of the wood ticks, which range in size from a pin point to a fingernail. During the dry season as many as a hundred may drop from a disturbed leaf on to a person as he passes by. One of the most common pastimes of the Indian children, in fact, is picking off wood ticks from returning hunters.

The flora, like the fauna, is typical of the Amazon River Valley. The forests may be characterized especially by an abundance of palms, among which the principal varieties are the motacú, assaí, chonta, totaí, samuque, and cusi. All of these palms yield an edible heart and nuts or fruits, which constitute an important part of the diet of the Indians. No less important in this respect are other fruit trees, particularly the pacobilla, the coquino, the pacáy, and the aguaf.

Of the trees not producing fruit few are used by the Siriono. An exception is the ambaibo, the fiber of whose bark is twined into string out of which the hammocks and bow strings are made. Abundant in the area, however, are such common Amazon Valley trees as mahogany, condurú, cedar,

bamboo, massaranduba, itaúba, mapájo, bibosi, palo santo, ochoó, and rubber. Along some of the rivers there are also stands of chuchio (reed), from which the Siriono make their arrow shafts.

The pampa chiefly supports a grassy vegetation that is able to withstand extremes of wetness and dryness. Rows of palm are sometimes encountered on the pampa, but more often than not these plains are barren of trees as far as the eye can see.

PHYSICAL TYPE

Because of the lack of accurate instruments while I was in the field, I was unable to record exact physical measurements of the Siriono. Roughly speaking, however, it can be said that the men average about 5 feet 4 inches in height; the women, about 5 feet 2 inches. The cephalic index falls within the range of brachycephaly to mesocephaly; the nasal index is definitely platyrrhine.

Except in the cases of obvious crosses (the area has not lacked travelers, some of whom may have left their marks) skin color is very dark—almost negroid. The same may be said for the hair, which is not only jet black, but coarse and straight as well. The eyes are a deep brown in color; the Mongolian fold is marked.

Pilosity is not pronounced but is greater than in most Indian groups. Some of the men have well developed beards, and all have a full growth of pubic hair, with a lesser growth of axillary hair. Women show marked differences with respect to pubic hair; some have heavy growths while others have none at all.

Head hair is extremely thick on both sexes and grows to a very low line on the forehead. Children are always born with a full head of thick hair, and

the extension of the hair line to a point very low on the forehead is also very striking at birth.

Except for a very poor development of the lower legs, the Siriono are well-constructed physical specimens. Ontogenetically, they seem to fall within the normal human range. The men demonstrate a marked growth of the shoulder muscles as a result of pulling the bow; the women tend strongly to distended abdomens and pendant breasts, especially after childbirth. The protruding stomachs frequently found in children are almost always due to hookworm.

As a result of the habit of picking up objects between the big and the second toe, most men and women possess well developed prehensile toes. One rarely sees an Indian retrieve anything from the ground with his hands that he is able to pick up with his feet.

An unusual physical characteristic among the Siriono, one which might almost be called a mutation, is the small hereditary marks which characterize the backs of their ears. These marks or depressions in the skin, which appear at birth, look as if a little piece of flesh had been cut out here and there. If a Siriono were in doubt as to whether he were talking to one of his countrymen he would need only to look at the backs of his ears to identify him. These marks do not appear in any of the crosses I have seen. Most of the Indians with whom I talked, however, were only vaguely conscious of this characteristic and had no explanation for it.

Another unusual feature of the Siriono is the high incidence of clubfootedness. This trait appears in about 15 percent of the population. At some time in Siriono history this recessive character has appeared and persisted because of the highly inbred character of the group.

HISTORY

The Siriono are an anomaly in eastern Bolivia. Widely scattered in isolated pockets of forest land, with a culture strikingly backward in contrast to that of their neighbors, they are probably a remnant of an ancient population that was exterminated, absorbed, or engulfed by more civilized invaders. Their language, however, is Tupian, elsewhere spoken by tribes of a more complex culture, but here represented only by themselves and the Guarayu-Pauserna, whose dialects are

closely related. Traditions of friendship suggest that these peoples may once have been linked by a now obscure bond.

With the rest of their neighbors the Siriono show few affinities, cultural or linguistic. To the north and west live the warlike Moré, with whom they have had no contact. To the west are settled the Mojo, with whom they likewise have had little intercourse. Only in recent times have they associated with the Bauré and Itonama, who reside to

the north and who have been acculturated since the days of the Jesuits. Whenever possible they avoid clashes with the so-called Yanaigua, who wander to the south and who occasionally raid them, killing their men and stealing their women and children.

It is probable that the Siriono are of Guaraní origin, that they have gradually been pushed northward into the sparsely inhabited forests they now occupy, and that in the course of their migrations they have lost much of their original culture. There is no evidence, cultural or linguistic, however, to support the theory held by Nordenskiöld (1911, pp. 16-17) that they represent a substratum of culture which once existed widely in the area they now occupy. The intangible aspects of Siriono history still await reconstruction.

Our previous knowledge of the Siriono, which is very scanty, dates from 1693, when they were first seen for a few days by Father Cyprian Barrace.³ At that time the Siriono were occupying the deep forests in the southern part of the same region which they inhabit today. After first contact, and before their expulsion in 1767, the Jesuits probably made several attempts to missionize them. At any rate, in 1765 a few Siriono were coaxed into the mission of Buena Vista and were later transferred to the mission of Santa Rosa on the Rio Guaporé. So far as we know, no other attempt was made to missionize them until comparatively recent times. Of these endeavors most have failed, not so much because of warlikeness, since this character has been falsely attributed to the Siriono, but because of their sensitivity to maltreatment and their adherence to nomadic life.

In 1927, decimated by smallpox and influenza, a small group of Siriono was settled at the Franciscan Mission of Santa María near the Rio San Miguel. This venture did not result in success. In 1941 I met many Indians in the forests between Tibaera and Yaguarú who had formerly been living in Santa María but who had reverted to a nomadic existence because of what they regarded as unsatisfactory conditions of life at the mission.

³ All that is recorded of Father Barrace's contact with the Siriono is the following: "It was not long before the holy man discovered another nation. After traveling some days he found himself amidst a people called the *Cirionians*. The instant these barbarians perceived the Father, they took up their arrows and prepared to shoot both at him and at the converts in his company, but Father Cyprian advanced up to them with so kind an aspect that their arrows dropped from their hands. He made some stay with them; and, by visiting their various settlements, discovered another nation called the *Guarayanos*" (*Lettres édifiantes* . . . , 1781, vol. 8, p. 105).

In 1935 American evangelists founded a mission for the Siriono at the site of an old Mojo mound called Ibiato, some 60 miles east of Trinidad. By 1940 this mission had a population of about 60 Indians, but it, also, could not be called a successful undertaking, because of lack of funds and trained personnel. The same may be said for the Bolivian Government Indian School established at Casarabe—40 miles east of Trinidad—in 1937. However noble in its purpose, the function of this school ultimately resulted in the personal exploitation of the Indians by the staff, so that, through maltreatment, disease, and death, the number of Siriono was reduced from more than 300 in 1940 to less than 150 in 1945.

Of the remaining Siriono who have abandoned aboriginal life, a great many are living today under *patrones* on cattle ranches and farms along the Rio Blanco, Rio Grande, Rio Mamoré, and Rio San Miguel; others, who were captured as children in the forests, are now acting as servants in the villages of Magdalena, El Carmen, Huacaraje, and Baures. As to the distribution of the Siriono south and southwest of Guarayos, I have no information because I never visited this area and the literature tells us nothing. However, the total population of the Siriono today is probably about two thousand.

Alcide d'Orbigny, the great French scientist and explorer, was the first writer of any importance to mention the Siriono. In 1825 he had an opportunity to study a few captured Siriono at Bibosi, a mission north of Santa Cruz de la Sierra. Since D'Orbigny's remarks on the Siriono were the first of any significance ever to be published, I quote them *in extenso*:

Less numerous than the Guarayos, the Siriono live in the heart of dark forests which separate the Rio Grande from the Rio Piráy, between Santa Cruz de la Sierra and the Province of Moxos; from 17° to 18° south latitude and about 68° longitude west of Paris. The Siriono inhabit a large area although, according to many captives from this tribe whom we have seen at the mission of Bibosi, near Santa Cruz, their number hardly reaches 1,000 individuals.

No historian has spoken of them; their name appears only in some old Jesuit letters. According to the information we obtained in the country, the Siriono are perhaps the remains of the ancient Chiriguano, having since the conquest always inhabited the same forests. Attacked by the Inca Yupanqui about the fifteenth century, they were forced at the beginning of the sixteenth century to flee from the Guaranis of Paraguay who captured their settlements and, according to historians, annihilated them. Be

that as it may, it is possible that the Siriono, well before the Chiriguano, had come from the southeast and had migrated into areas far distant from the cradle of the Guarani nation.

The Siriono live under the same conditions as the Guarayos and have about the same color, stature, and fine proportions, judging from the few we have seen. In general, their features are the same, but they have a more savage appearance, a fearful and cold expression which is never encountered among the Guarayos. Since they have the custom of depilating their hair we cannot say whether they have as bushy a beard as the Guarayos.

We have been assured that their language is Guarani, but corrupted to the extent that they cannot understand the Chiriguano perfectly. As to their personality, it differs essentially from that of the Guarayos; they are so savage and hold so strongly to their primitive independence that they have never wanted to have contact with Christians. No one has been able to approach them unarmed. Their forebears were gentle and affable, but these are less communicative. They live in scattered tribes which wander deep into the most impenetrable forests and live only by hunting. They build rude huts formed of boughs and know no other comforts of life; everything indicates that they live in the most savage state. They have no other industry than the making of weapons. These consist of bows eight feet long and arrows even longer, which they most often use seated, both the feet and hands being employed to shoot with great force; thus they are obliged to hunt only big game. Both sexes go entirely nude, with no clothing to burden them. They do not paint their bodies and wear no ornaments. On their trips they do not use canoes. If they have a river to cross they cut lianas which they attach to a tree or to stakes placed for that purpose on the banks of the river. They wind the liana around tree trunks resting in the water, thus forming a kind of bridge which the women cling to in crossing with their children. Whenever they get the opportunity they attack the canoes of the Moxos and kill the rowers to obtain axes or other tools. This is all we have learned about this tribe, without doubt the most savage of the nation [D'Orbigny, 1839, trans., pp. 341-344].

José Cardus was the next writer of any significance to deal with the Siriono. In his book on the Franciscan Missions of eastern Bolivia (Cardus, 1886, pp. 279-284) he devoted about 5 pages to a description of the condition and culture of the Siriono in the latter part of the nineteenth century. Following Cardus, Nordenskiöld (1911, pp. 16-17) interviewed two Siriono on his 1908-9 expedition to eastern Bolivia, and on the strength of this published a 2-page article about them which, however, contains very scanty data. In 1910 Theodor Herzog (1910, pp. 136-138, 194-200) published a short account of the geography of the area which also embodies a few notes on the Indians. In 1928 Arthur Radwan (1929, pp.

291-296) wrote a brief description of Siriono culture which deals primarily with their contacts with the Franciscan fathers at Santa María.

Some years ago, considerable stir was caused in the anthropological world by the publication of a series of articles and books by Richard Wegner (1928, pp. 369-384; 1931; 1932, pp. 321-340; 1934 b, pp. 2-34) on a month's journey to the Siriono country—to the Siriono between the Rio Piráy and Rio Grande and to those of the Mission of Santa María. In his various articles and books Wegner claimed to have discovered a primitive group of Siriono which he called *Quruñgu'a*, who possessed no language but whistling. Although this statement is patently absurd—I, too, have been with groups of Siriono who were uncommunicative for long periods of time—it should be pointed out that Wegner's observations on the material culture, although not outstanding, are fairly accurate. However, his statements about language (or its lack), group classification, religion, and other subjects do not check with my findings, nor with those of the Franciscan monk, Anselm Schermair (1934, pp. 519-521), who has written a brief article refuting the claims made by Wegner. My own data substantially agree with those of Padre Schermair, in so far as he has published them. For many years this Franciscan father has been collecting a vocabulary of the Siriono language, but his works have never been published. They will be awaited with great interest.

In 1937 Stig Rydén spent 3 weeks collecting ethnological specimens and interviewing Indians at Casarabe. His results have been recently published (Rydén, 1941). Although the descriptions of his material collections are accurate enough, Rydén's statements about the non-material aspects of culture are mostly inaccurate because he was probably deceived by staff members of the school at Casarabe into recording false information about the Indians. Moreover, lacking adequate primary data, Rydén padded his work with irrelevant speculations and comparisons which are largely meaningless for the reconstruction of Siriono history.

Finally, it should be mentioned that most of the extant data on the Siriono were admirably summed up by Alfred Métraux in 1942 (Métraux, 1942, pp. 110-114).

TECHNOLOGY

Technologically speaking, the Siriono can be classified with the most culturally backward peoples of the world. They subsist with a bare minimum of material apparatus. Being semi-nomadic, they do not burden themselves with material objects that might hamper mobility. In fact, apart from the hammocks they sleep in and the weapons and tools they hunt and gather with, they rarely carry anything with them. What few other material objects they make and use are generally hastily fashioned at the site of occupancy. A brief account of the principal technological processes and manufactured articles, with their uses, follows.

FIRE

Fire making is a lost art among the Siriono. I was told by my older informants that fire (*táta*) used to be made by twirling a stick between the hands, but not once did I see it generated in this fashion. Fire is carried from camp to camp in a brand consisting of a spadix of a palm. This spongelike wood holds fire for long periods of time. When the band is traveling, at least one woman from every extended family carries fire along. I have even seen women swimming rivers with a firebrand, holding it above the water in one hand while paddling with the other.

In the hut every family has its own fire on the ground by the side of the hammock. Dried leaves of motacú palm are used to bring a fire to a blaze. Any dried or rotten wood serves as firewood (*ndéa*). The logs are placed on the ground like the spokes of a wheel, the fire being made in the part corresponding to the hub. As the ends of the logs burn down they are pushed inward. Cooking pots are placed directly on the logs. No hearths are used.

GLUE MANUFACTURE

The only native "chemical" industry is the making of glue from beeswax (*iríti*). This product is used extensively in arrow making. The crude beeswax collected from the hive is put in a pot, mixed with water, and brought to a boil. While it is cooking, the dirt and other impurities are removed. The wax is then cooled and coagulated into balls about the size of a baseball.

When desired for use, the wax is heated and smeared over the parts to be glued. It is generally but not always the men who prepare and refine beeswax.

TEXTILE INDUSTRIES

String and rope are twined by the women from the inner bark of the ambaibo tree. The tree is usually cut down by the men, who remove the outer bark in strips, pull the inner bark from them, and carry this back to camp. It is then thoroughly chewed by the women and placed on a stick over the fire to dry. The resulting shreds are twined into bowstrings, hammock strings, hammock ropes, and baby slings.

One of the most time-consuming activities of the women is the spinning of cotton thread (*nínju*). The spindle is made by the men from chonta palm. It is planed into shape with a mussel shell. It is more or less circular in cross section and about a half inch in diameter at the middle; it is pointed at both ends and is about 3 feet long. The whorl consists of a disk of wood or baked clay which is put on the spindle from the bottom end.

The women prepare the cotton for spinning. The balls of cotton are first collected from the plant and then pulled apart and flattened into paper-thin sheets about 6 inches square from which the impurities are picked out. The cotton is then ready for spinning. During this process the woman is seated, usually in the hammock. The squares of unspun cotton rest on one thigh (a distaff is not employed) and the spindle on the other, with the whorl end resting on the ground at an angle of about 60°. The woman pulls a thread-like line of cotton from one of her squares, attaches it to the spindle, and spins it into thread by rolling the spindle on the thigh from the hip to the knee. As the thread accumulates, it is rolled around the bottom of the spindle. Cotton thread is employed extensively in arrow making, for wrist guards, in twining baby slings, and in decorating the body on festive occasions. It is generally coated with uruku, a red paint made from the seeds of *Bixa orellana*.

The hammock (*kíza*) is the principal article of furniture in every Siriono hut. Hammocks are made by the women from string twined from bark fibers of the ambaibo tree and are very durable,

lasting several years with the roughest treatment. In making a hammock a woman first digs two holes in the ground with her digging stick, as far apart as the length of the hammock is to be. Two posts about 5 or 6 feet long are then planted in the holes. The woman ties one end of her ball of string, previously twined, to the bottom of the post on her right, passes the string around the post to her left and back on the far side around the post on her right, and so on, continuing these winds, which are about one-fourth of an inch apart, up the poles until she calculates that the desired width of the hammock has been reached. The resulting warp strings form two series of parallel lines, one at the front and the other at the back of the posts.

The weft strings are made of the same material as the warp strings, but are finer twined than the latter. They are applied from bottom to top. The weaver places a weft string around the bottom warp string at the front of the posts and midway between them. She holds the warp string with her left hand and pulls both ends of the weft string tightly with the other hand to form two weft strands of equal length. She then takes the under strand in her left hand, crosses it over the upper strand which is held in her right hand, and then transfers each strand to the opposite hand, after which she pulls the twist tightly around the warp string. She then takes the first back warp string, pulls it over until it rests on the twist formed around the first front warp string, and gives the weft strands a second twist. She continues alternately to gather up the warp strings from front to back until all of them are held in place by a weft string, the ends of which are finally tied into a square knot at the top of the hammock. Usually about a dozen weft strings, placed about 6 inches apart, suffice for a hammock. After they have been applied, ambaibo bark fiber is bound around the hammock about 4 inches from each end, and it is then ready for hanging.

Hammocks vary in size, but one shared by husband and wife will be about 6 feet in length and about 4 feet in width. It usually takes a woman a full day to make a hammock, once the string has been prepared. Hammocks are almost always carried along on expeditions or hunting trips, but in case a person gets caught overnight in the forest without his hammock, a rude one is some-

times fashioned of liana in the manner described above.

Baby slings (*erénda*) are twined by the women in exactly the same way as hammocks, the only difference being that they are more often made of cotton than of bark-fiber string and that all the front warp strings are held together by one series of weft strings while those at the back are held together by another. During pregnancy a woman usually twines a new sling so as to have it ready when her infant is born, for a new sling is made for every child. Slings are about 3 feet long and 2 feet wide.

Baskets (*ináku*) are plain and are made by the techniques of checkerwork and twilling. They may be classified into two types: those hastily constructed in the forest for carrying in game, wild fruits, or other products, and somewhat better ones woven for the storing of articles in the house. The former are always made of the green leaves of the motacú palm (by either the men or the women) and are thrown away as soon as their purpose has been served; the latter are more carefully woven (almost always by the women) of the ripe leaves of the heart of the motacú palm, and are a more or less permanent feature of every Siriono hut. Special baskets are made for storing such things as feather ornaments, pipes, cotton and bark-fiber string, necklaces, calabashes, beeswax, and feathers for arrows and ornaments. When the band is on the march, the various small baskets are placed in one large basket and are thus transported to the next camping spot.

In addition to baskets, women occasionally weave mats from the heart leaves of the motacú palm. These are used to sit on, to roll out coils of clay for pot making, and to wrap the bodies of the dead. Fire fans are also woven by the women. The Siriono do not manufacture any type of barkcloth, nor do they use hides for anything but food. Feathers are applied to arrows and are used to make ornaments for decorating the hair, but featherwork as an art is not practiced.

CERAMICS

The pottery industry is poorly developed, but rude, plain pots (*ñeo*) are occasionally made by the women. Since more food is broiled or roasted than boiled or steamed, a family rarely possesses more than one pot.

The banks of rivers serve as the principal source of clay. It is dug out by the women with the digging stick and carried home in baskets. In making a pot, the lumps of clay are first mixed with water and with carbonized seeds of the motacú palm which constitute the temper. The resulting mixture is made into balls, from which coils for the sides of the pot are rolled out, and into disks, from which the base of the pot may be formed.

The base is molded, either out of a disk of clay (in case the bottom of the pot is to be rounded) or out of a small coil (in case it is to be more pointed). It is molded entirely with the fingers, and when finished is placed in a slight depression in the ground into which ashes have been put to serve as a cushion.

The rest of the pot is constructed by the coiling technique. After the base has been molded, the coils are rolled out one by one on a mat of motacú palm and applied in turn. In making a pot a woman works the coils of clay together with her fingers, on which she frequently spits. In addition, she employs the convex surface of a mussel shell called *hitai* to smooth out the clay. After one or two coils have been added to the base of the pot, it is generally left standing to dry for a day before others are added. In this way the pot does not lose shape by having too much weight at the top when the clay is wet. Thus several days commonly elapse before a pot is complete. Once finished, it is left to dry in the shade for about 2 days before it is baked.

Pots are baked in the hot ashes of an open fire. As each section of a pot hardens, it is turned slightly so as to bake another. To maintain an even heat, sometimes a pot is covered with green boughs and chips while it is baking. Since the method of baking is very crude, pots are very fragile and must be handled with great care. They vary in size from about 5 to 10 inches in diameter at the top and from about 8 to 14 inches in height.

Pipes (*keákwa*), like pots, are made from a mixture of clay and carbonized seeds of the motacú palm. The entire pipe, including the stem, is molded from a single disk of clay, the fingers alone being used. As a woman molds the bowl she leaves at the bottom a small lump of clay from which the stem is later fashioned. After finishing

the bowl, she fashions this lump into a conelike shape and then inserts a palm straw into the bowl to make the hole for the stem. She then molds the lump of clay bit by bit around the straw until the stem of the pipe is of the desired length, leaving a little decorative projection at the bottom of the bowl which is called *éka* or *teat*.

After a pipe has been molded it is dried in the open air for a couple of days and then baked in the coals of a fire as is a pot. In baking, the straw in the stem is burned out, leaving a hole through which to suck the pipe.

Circular spindle whorls are sometimes made by women from small disks of clay hardened in the open fire as a pipe or a pot is. Before they are baked they are fitted on to the spindle so that the hole in the whorl will be of proper size.

UTENSILS

Calabashes (*yabóki*) are prepared as drinking vessels in the following manner. A round hole about an inch in diameter is cut in the top of a gourd with the gouging tool. A small stick is then inserted, and the seeds are loosened and shaken out. The calabash is then washed on the inside and dried slowly in the fire, water being squirted on the outside from time to time to keep it from burning. Calabashes, though used primarily as drinking vessels, are also employed for making mead and for storing tobacco, feather ornaments, and animal teeth.

When calabashes are scarce, hollow sections of bamboo are sometimes used as drinking vessels, to store wild honey, and to make mead. They are simply cut to the length desired.

Mortars (*mbúa*) are sometimes hollowed out of fallen logs that lie near camp, but sections of a log are never cut especially for this purpose; that is, a section of a log is not cut, set up, and hollowed out on the end for use as a mortar. To make a mortar, a hole is made in the side of a fallen trunk with fire, the charcoal being chipped out with a digging stick, which also serves as the pestle. Mortars are used principally for grinding corn for food and mead, and for grinding burned motacú seeds for temper for pots. They are never carried from camp to camp.

No spoons, plates, bowls, or bags are manufactured by the Siriono. Pots and baskets have already been described.

TOOLS

The digging stick (*síri*)—the only agricultural tool—is made by the men from chonta palm. After a section of wood has been removed from the tree, it is planed to the desired shape with a mollusk shell called *urúkwa*. The digging stick is about 3 feet in length, 3 inches in width, and about an inch in thickness. The bottom end is sharpened so as to make it a more effective tool. The digging stick is used principally in planting and tilling, in grinding corn, in digging out clay for pots, and in extracting palm cabbage and honey.

The Siriono construct a gouging tool by hafting an incisor tooth of an agouti or paca onto a femur of a howler monkey. This tool is employed principally to gouge out the nock in the reinforcing plug which is inserted in the feathered end of the arrow. In using the tool the handle is grasped in the right hand with the tooth down. The plug is held in the left hand, and the tool is worked back and forth over it until a groove large enough to hold the bowstring is made. This tool is also employed in making holes in the root ends of the animal teeth from which necklaces are strung.

Some mention should also be made of the use of a mollusk shell, called *urúkwa*, and a mussel shell, called *hítai*, as tools. The former is used by the men as a plane in making digging sticks, spindles, and bows, while the latter is employed by the women to smooth out the clay when making pots. The mandible (with teeth) of the palometa fish also serves as a tool, being employed to sever the aftershafts of the feathers glued on arrows. Any piece of bamboo serves for a knife, but no work is done in bone, horn, shell, stone, or metal. European axes and machetes have been introduced to those bands which have had contact, but under aboriginal conditions European tools are rarely encountered.

WEAPONS

The bow (*ngidá*) and arrow are the only weapons manufactured or used by the Siriono. Every adult male possesses a bow and arrows which he makes himself. So important are these weapons that when not hunting, a man, if busy, is most frequently observed making a new arrow or repairing an old one broken on the last hunt. A man's bow and arrows, in fact, are his inseparable companions. When he is asleep in the house they rest upright against the frame pole to which his

hammock is tied, and when he is walking in the forest he is invariably seen with his bow and a bundle of arrows over his right or left shoulder, points facing ahead, in quest of game.

The wood from which the bows are made is a variety of chonta palm, called *síri*. This tree, when mature, is about 12 inches in diameter and has a layer about 2 inches thick of very hard, black wood just underneath the bark. It is from this layer that the bow is constructed. Although the material is relatively abundant in the environment, before making a new bow a hunter will search for some time to locate a chonta tree which has the appearance of being of proper maturity and hardness. It is a rare tree that has just the right qualities. The wood must be firm and resilient and must withstand the maximum pulling strength of the hunter without breaking. Frequently I have seen a man spend a couple of days in the construction of a bow only to have it snap on the first pull.

After a suitable tree has been sighted it is felled. I have never seen this done other than with an ax, but one of my oldest informants told me that he had known chonta palms to be felled by building a fire against the trunk until the hard layer had been burned through and then pushing the tree over. When a tree has been felled, a section of the circumference of the trunk, about 4 inches wide and as long as the hunter wants his bow to be, is cut out. Other smaller pieces of chonta may also be removed at this time, as this material is likewise indispensable in the construction of arrows.

Once the material has been taken out, work on the construction of the bow begins almost at once, before the wood dries out. Bows are plain and are made of a single stave. The making of a bow is a laborious process, as it is fashioned almost entirely by using mollusk shells, called *urúkwa*, to plane the wood down. A small hole is first made in the surface of one of these mollusk shells. The edges around the hole are then worked downward with the grain, and the section of wood is gradually planed to the desired shape. If a man possesses a machete, he may first use this to give the bow its approximate shape by roughly tapering the horns, but the finishing is always done with the shell to avert the danger of splitting the wood. In planing down a bow it is held securely on the ground between the big and the second toe.

In cross section a bow is roughly oval in shape, being about 2 inches in diameter in the middle and gradually tapered to a cross section of about a quarter of an inch at the horns. The inner side of the hard layer of the tree forms the belly of the bow, while the bark side forms its back. After a bow has been worked to the desired shape, a small amount of bark fiber from the ambaibo tree is wrapped around each horn to keep the string from slipping toward the limbs. The horns of the bow are not notched to hold the string.

The bowstring is twined by the women of ambaibo bark fiber. It is applied as follows. A permanent loop, which will just fit over one horn of the bow, is tied in one end of the string. A half hitch on the other end of the string is placed over the opposite horn and the string is gradually tightened by pulling on the hitch while bending the bow. This is done by resting what will be the top horn of the bow on the ground at an angle and grasping the other horn in the right hand; the left hand is thus left free to manipulate the string which is to be tightened. The inside of the left knee is then placed in the center of the belly of the bow, the foot resting on the back further down. By exerting pressure between the right arm, the knee, and the foot, the bow is bent to the desired degree, and the string is pulled tight by the left hand. To keep it tight a second half hitch is thrown over the first, above the fiber lashing on the horn. The remainder of the bowstring is pulled up the bow to just below the center and wound back around it and over the section of the string which runs up the limb. The end of the string is secured by placing it under a couple of the turns and pulling it tight. The bow is then ready for drawing.

If a hunter is right-handed, as are most of the Siriono, the bow is drawn in the following manner. It is grasped in the middle with the left hand. Because of its great length, the top horn is tilted at an angle of about 30° to the right of perpendicular, so that the bottom horn does not rest on the ground. The hunter spaces his feet from 2 to 3 feet apart, the left foot, of course, always being placed forward.

The secondary release is employed in drawing the bow. The arrow is held between the thumb and first finger of the right hand; the remaining fingers assist in drawing the string. The left arm is held rigid, and the arrow shaft slides between

the thumb and first finger on the side of the bow to the left of the belly. The bow is drawn to a maximum distance allowed by the arms. As the bowstring passes his head, the hunter sights along the arrow to aim. He withdraws his head just before releasing the arrow, and the string flies by his face. He always wears a wrist guard of cotton string to avoid damaging his skin.

The stance indicated above is essentially the same whether one is shooting in a tree, straight ahead, or from a tree into water. If a hunter is left-handed, the procedure of drawing the bow is exactly the same, but reversed.

A new bow is always drawn gradually at first and is sometimes left for one night with the string taut before it is used, so as to give the wood a chance to expand gradually. A bow which is in service, however, is always unstrung following each day's hunt.

After a new bow is made it needs little attention, except for a change of string, until it breaks or has lost its resiliency. The life of a sturdy bow may be a year or more, depending upon how often it is used. A hunter does not make spare bows. Only when his bow breaks or when it has been used so much that it has lost its life does he make a new one. Occasionally, when a hunter notices that his bow is drying out, he places it in water for several nights until its proper resiliency is restored.

Bows vary in size, depending upon the hunter, but all are long, perhaps the longest in the world. On the average they range between 7 and 9 feet in length, although I have seen one that measured 9 feet 7 inches. The Indians themselves have no explanation of why they use such a long bow, other than to say they were taught to do so by their fathers. They assert, however, that a short bow is no good. The explanation is probably to be sought in the manner in which the Siriono use the bow in shooting. It is bent to the maximum distance allowed by the arms before the arrow is released. If a short bow were used, it is likely that the wood could not withstand the strain of the pull or that the hunter would not have sufficient strength to bend it to the desired degree.

Although arrows, like bows, vary in size, only two general types are made: one, called *úba*, with a chonta head containing a lashed barb; the other, called *tákwa*, with a lanceolate bamboo head but containing no barb. The former type is used

almost exclusively for shooting smaller game in the trees, while the bamboo-headed arrow is reserved for killing the larger game on the ground. Chonta-headed arrows average from 7 to 9 feet in length; bamboo-headed arrows, from 8 to 10 feet. The arrows used by the Siriono are probably longer than those used by any other known people in the world.

Except in the case of an emergency or a shortage of material, arrow shafts (*ékua*) are always made of reed (*Gynerium sagittatum*). The plant is found in abundance along the banks of the rivers and at some points inland, but is only suitable for use in arrow making for about 2 months during the rainy season—in March and in April. Consequently, a whole year's supply of not less than 30 reeds is usually harvested during these months. If a man runs out of reeds before the next season comes around, a species of bamboo may be substituted, but this material is considered inferior since it makes an inaccurate arrow.

Like bow making, arrow making is exclusively a task of the men, and, there being no specialists in this occupation, each man makes his own arrows. The reeds are first cut near the butt end and then cured. This is usually done by drying them gradually in the sun for about 4 days, but it may be hastened by the use of fire. Before an arrow is made, the shaft must be straight and dry. While the reeds are curing, a man prepares the other materials needed for the construction of an arrow: feathers, chonta or bamboo heads, beeswax, etc. Consequently, when the shafts are straight and dry, all materials are ready for the construction of an arrow.

A chonta-headed arrow is made in the following way. A shank of chonta wood about 18 inches in length, pointed at both ends, and of a diameter so as just to fit the hollow distal end of the reed, is fashioned with a mollusk shell called *urúkwa*. About one-half of this shank is coated with prepared beeswax called *iríti* and inserted up the hollow shaft for about 6 inches. The part of the shaft containing the shank is then loosely bound with ambaibo bark fiber and left to dry. While it is drying, a small conical plug (*éáfa*), likewise coated with hot beeswax, is inserted in the proximal end of the reed. This plug contains the nock of the arrow. After both have dried, the chonta shank and the plug containing the shaft are bound securely in place. This is done with fine cotton

string which has been previously coated with paint made from ground seeds of uruku (*Bixa orellana*) mixed with saliva. To bind the shank, the arrow maker removes the bark fiber and begins to wind cotton string around the shaft about 4 or 5 inches from the distal end, continuing his winds downward until about 3 inches of the protruding shank have been covered; to bind the plug, he begins to wind cotton string around the shaft from the proximal end, continuing his winds about 3 or 4 inches down the shaft. The ends of the string used for lashing are coated with beeswax to hold them in place. The arrow is now ready for feathering. For this purpose only two kinds of feathers (*éó*) are used, except in case of emergency. All chonta-headed arrows are feathered with the large wing or quill feathers of the curassow, while bamboo-headed arrows are feathered with the large wing feathers of the harpy eagle. Informants were emphatic in stating that these are the only feathers ever used, and it was rare that I saw an arrow feathered otherwise. Occasionally, however, the feathers of one of the smaller varieties of guan are used.

Feathering is done by the Peruvian cemented technique. Before a feather is put on, however, about 5 inches of the arrow shaft, below the lashing which secures the plug containing the nock, is coated with hot beeswax. Then the aftershafts of a feather are removed (the mandible, containing teeth, of the palometa fish is used for this purpose) and placed over the soft beeswax along the shaft and in line with the nock. They are then lashed by winding at intervals between the barbs of the feather a very fine thread taken from a grasslike plant growing near rivers, called *dičibi*. Nowadays, when available, manufactured cotton thread is considered ideal for this purpose. After the feathers have been glued and lashed to the arrow shaft, the beeswax is smoothed out by rubbing a wet thumbnail over it.

A single barb (*erási*), about one-half inch in length, is lashed onto the chonta shank of an arrow about half an inch from the point. Barbs are generally made from the hard stays which grow in the soft wood in the center of a palm tree which the Siriono call *hindoéra*, although chonta wood is also used sometimes. The barb is flattened on one end and lashed securely to the shank with fine cotton string coated with beeswax.

Bamboo-headed arrows are made in almost

exactly the same way as chonta-headed arrows except that the bamboo head is lashed onto a chonta shank that is flattened on the distal end. Nowadays, bamboo arrowheads are cut out with bush knives, but formerly they were shaped with mollusk shells. They are glued to the flattened chonta shank with beeswax and lashed tightly to it with cotton string covered with uruku paint.

After an arrow has been finished it should have a certain twang when set in vibration. This is tested as follows. The maker grasps the arrow in about the middle of the shaft with his left hand and lifts it up to the height of his eye. While sighting along the shaft he grasps the nock end of the arrow between the thumb and first finger of his right hand and bends the shaft slightly toward his face. He then releases his fingers with a snap and the arrow, if a good one, vibrates with a twangy sound. An arrow which does not produce this sound when set in vibration is thought to be a poor one.

Arrows are always retrieved and are frequently damaged on the hunt. If the shaft of an arrow is broken, a cross section is cut off evenly on both sides of the break, and a pencillike rod of chonta palm wood, about 6 inches long and covered with beeswax, is inserted about 3 inches up the hollow shaft of one part of the broken reed. The protruding piece of the chonta rod is then inserted into the hollow shaft of the other part of the broken reed until both parts of the reed meet. To complete the job of mending, cotton string is wound around the shaft for about 3 inches over the break.

Some mention should also be made of the use of pieces of wood as weapons. Clubs are never manufactured but chunks of wood cut or picked up at random sometimes serve as clubs to kill wounded animals and to pound with.

HOUSING

To judge from the type of house constructed, the problem of shelter among the Siriono is not a serious one. Little time is spent in making a dwelling, nor when built does it comfortably protect them either from the inclemencies of the weather or from the ubiquitous insect pests that continually harass them. The house, whether shared by the entire band or hastily erected by a single family or hunting party on the march, is always the same general type, although varying

in size and degree of completeness. It consists of a roughly rectangular frame of poles against which are set, at an angle but not bound together, the long leaves of the motacú palm. The house is thus but an elaboration of the most simple type of lean-to or wind screen.

No one person supervises the construction of a house. Before building one, a site is selected by general agreement. It must be near water and relatively free of underbrush but at the same time should contain a few sturdy trees to serve as upright supports or columns upon which to lash the frame. Care is taken to select a spot which contains no dead or rotten trees that may fall over during occupancy. However, trees are never cut down to clear a house site; rather, the house is built around them.

After a site has been selected, the men go in quest of poles for the frame. Nowadays these are cut from nearby trees with machetes, but formerly they were doubtless hacked off with the digging stick. No particular type of wood is specified for the construction of the frame, although frequent use is made of soft chonta palm trunk and of heavy bamboo, which is abundant in certain parts of the area. The sturdiness and size of the poles for the frame depend upon the number of people who will occupy the house. They must be of sufficient strength to withstand the weight of all the people in the house, since their hammocks and gear are tied to the poles of the frame as well as to the trees onto which they are lashed. If the distance between the trees to be used seems too great to bear the weight that the poles will have to support when they are lashed between them, additional forked trunks are sunk upright in the ground by digging them in with the digging stick to add further support to the frame.

The poles, when cut, are lashed to the outer side of the trees and in the forks of the upright columns with lianas, which are wound several times around the poles and the supports until they are secure. This liana lashing is fastened with half hitches. The entire frame is bound to the trees and to the upright supports at a height of about 5 feet above the ground.

The next and final operation in house building consists merely in setting against the frame, at an angle of about 60° from the ground, several layers of the green leaves of the motacú palm.

These leaves, which form both the walls and the roof, are placed with the butt end on the ground. As they are about 15 feet long, they bend rather sharply at the top, so that when they have been placed around the whole frame, the house has a somewhat conical appearance. Often the leaves are not long enough to meet at the top, thus leaving a gap through which the smoke from the fires between every two hammocks escapes, and through which the rain enters freely during a storm. The house contains no doors or windows; one merely works one's way in through the palm leaves.

Nuclear families on a hunting and gathering expedition, when they may be absent from the band for from a few days to several weeks and are rather constantly on the march, take even less trouble in the construction of a nightly shelter. All they build is a rude shelter constructed like one side of the above-described house. The Siriono country is dotted with the remains of shelters erected by hunting parties that have stopped there for a night or two in their wanderings.

Having roamed over an extensive part of the area where the Siriono are accustomed to travel throughout the year, I can report that these are the only types of shelters that I ever saw built. When it rains, a shelter is improved to the extent that a few large leaves of patujú—a wild plant resembling the banana plant but not producing fruit—may be placed between the layers of motacú leaves and over the hammock where an individual sleeps, but such improvisations are rarely adequate to give one a dry night of rest if the rain is more than a sprinkle. On occasions when it rains heavily—and this happens on the average about 2 or 3 nights per week during the rainy season—the Siriono grumblingly takes down his hammock and squats by the fire, which is always carefully protected from the rain by leaves of the patujú, until the downpour passes. Consequently, he undergoes many a sleepless night during the year.

The building of a house entails no magical procedure, and it is almost always exclusively a task of the men. Arriving at a new camp site, the women are usually immediately occupied in tending their children, unpacking their gear, carrying water, and kindling a fire for cooking what victuals the day's march and hunt may have yielded. Meanwhile the men work cooperatively in cutting and lashing the poles for the frame.

The number of leaves placed against the frame, however, is largely an individual matter; if a man makes no move to cover that part of the frame where he will sleep with his family, no one else will bring leaves to cover his section of the house for him. At best, rarely more than two layers of leaves are placed over the frame. Moreover, a new house is never built larger than a size just sufficient to accommodate the people present at the time of building. If families are away from the band at the time, additional space is not provided to accommodate them, and when they return they themselves will have to add a section to the main house.

The average house sheltering a band of from 60 to 80 people is approximately 60 feet long, 25 feet wide, 15 feet high at the center, and about 5 feet high at the frame. It can be constructed in about an hour's time. Seldom is more than 15 minutes or a half an hour spent in the construction of a lean-to for the night.

Other types of buildings, such as cook houses, granaries, and club houses, are not built. A Siriono settlement consists of but a single hut, constructed in the manner described above.

The determination of why the Siriono maintain such an apathetic attitude toward house building and sheltering themselves from the unpleasant aspects of their environment, such as rain, cold winds, and insect pests, presents an interesting psychological problem. When first traveling with them, I was puzzled at why they even took the trouble to place a few leaves over their hammocks, since these seemed to offer them no visible protection. On closer scrutiny, however, I found that the few leaves placed over their hammocks did protect them from twigs and small branches which are continually falling from tropical trees in the night. Moreover, placing a few leaves over the hammock protects them from the rays of the moon, which are believed gradually to cause blindness if they fall directly on a sleeper. Other than this, the shelters of the Siriono seem to offer them little protection.

The house is but sparsely furnished. The hammock is the principal article of furniture. Hammocks are suspended across the width of the house with bark-fiber ropes tied to the frame poles and columns. Household articles such as calabashes and baskets are suspended with bark-fiber string from the midribs of the palm leaves that

form the walls and roof. Pots are left on the dirt floor. Houses are almost never cleaned. When they become unbearable new ones are built.

DRESS AND ORNAMENT

No clothing of any kind is manufactured or worn by the Siriono. The nearest approach to clothing—a custom probably adopted from the Brazilian Indians—I found among the easternmost Siriono. Here I observed some young boys, and a few young men of puberty age, wearing a twined G string of bark fiber wound tightly around the waist; under this the foreskin of the penis is tucked so as to lengthen it. Where clothes have been introduced, however, they are greatly sought after, not so much because of modesty⁴ but because clothes both adorn them and protect them to some extent from the ubiquitous insect pests that continually harass them. That they are mostly desired for adornment, however, is attested by the fact that no matter how many clothes they possess they always sleep stark naked at night when the insects are most abundant. Moreover, if a woman does possess a dress, before sitting down she always lifts it up and sits on her bare skin in preference to soiling her garment.

Even though they wear no clothing, the Siriono are rarely seen without some type of embellishment. Most commonly employed to decorate the body is a paint made from the seeds of the uruku plant, which is extensively used for ornamental purposes by many South American Indians. By spitting on the hands and mixing the saliva with a few uruku seeds a bright red paint is produced. This paint, which is never applied in any type of design, is rubbed especially on the face, but on some occasions the entire body is covered with it. Its function is both sacred and secular. Although its magical significance is of prime importance on such occasions as a birth or death, and in warding off illness, the body is covered with uruku for utilitarian reasons, namely, as a protection from insect bites and cold weather when mosquitoes are thick or when a cold south wind blows. Like the channel swimmer who shuts out the cold by

covering his body with Vaseline, the Siriono does so by covering his body with uruku.

Next in importance to uruku for decorative purposes are various bright-colored feathers (*éoti*) which are glued into the hair with prepared beeswax (*iríti*). Like uruku, feathers are extensively employed to decorate the hair on festive occasions. It is important to note that the same types of feathers are always used no matter what the occasion may be: a birth, a death, a drinking feast, or a bloodletting rite. Those employed come from the toucan (red feathers from the back, yellow feathers from the breast, and white feathers from under the wings), from the curassow (downy white breast feathers), and from the harpy eagle (also the downy white breast feathers). Although there are many other brightly colored birds in the area—the macaw, for instance—the types mentioned above were the only ones I ever saw used for decorative purposes. The underlying reasons for this, other than that the ancestors had followed the same pattern, I was never able to ascertain.

It is the women who pluck the feathers, prepare them into tufts, and glue them into the hair. In the case of the toucan, when the bird is killed the breast skin is always removed with the feathers, which are later plucked for decoration. In the case of the other birds mentioned, the desirable feathers are plucked after the dead animal has been brought to the house. The tufts are made by first binding 8 or 10 of the down feathers together at the base with a piece of cotton string or bark fiber and then covering the binding with prepared beeswax. The tufts are glued to the hair by first softening the beeswax with a firebrand.

In addition to tufts of feathers, bunches of quills of the peccary, porcupine, and paca are sometimes glued into the hair of young boys so as to make them good hunters of these animals when they grow up.

Necklaces (*éwi*) are worn both for adornment and for magical reasons. Animal teeth are especially favored in necklace making. When a coati is killed and after it has been cooked and eaten, the eye teeth are extracted with the fingers and small holes are gouged out in the roots of the teeth by the men, who employ for this purpose an eye tooth of a rat, a squirrel, or a paca hafted to the humerus of a howler monkey. After a sufficient number of teeth (no specified number) have been obtained, they are strung on a piece of cotton

⁴In this connection, about the only thing a Siriono man is modest about is displaying the glans of his penis, and when standing around he is constantly tugging at the foreskin so as to lengthen it. Women likewise display little modesty, but when sitting on the ground they always cover the vulva with one heel.

or bark-fiber string by the women. The penis bone of the coati or the gristle from the back of the ankle of the harpy eagle is sometimes added as a charm to these necklaces, which are worn especially by parents during the couvade period following birth.

Less often employed for making necklaces are the eye teeth of the spider monkey, which are drilled in the manner described above. Necklaces are sometimes made from the molar teeth of the peccary and the coati, but in such cases holes are not drilled in the teeth; they are merely tied to string which is placed around the teeth between the roots.

The hard black seeds of the chonta palm and toenails of the tortoise are sometimes drilled in the manner described above and are used for making necklaces. The base of the quill feathers of various birds, especially the parrot, the macaw, the harpy eagle, and the toucan, are also similarly employed. In the case of the toucan the wind-pipe may be dried, cut into sections, and strung into necklaces. Other products employed for making necklaces include small sections of young chuchio (the reed employed in arrow making), old hair wrapped in cotton string, sections of umbilical cord (also wrapped in cotton string and covered with beeswax), and even parts of discarded pipe stems.

Age, sex, and status differences do not affect the wearing of necklaces, although, as we shall later see, certain ones seem to be worn only on specific occasions.

Some mention should also be made of the widespread use of cotton string covered with uruku for magical and decorative purposes. This is wound around the wrists, the arms (above the elbows), the ankles, the legs (below the knees), and the neck of the father and mother after the birth of a child, and is worn for approximately a month thereafter. No rings, ear, nose, or lip ornaments are ever worn.

The only type of body mutilation found among the Siriono results from the practice of ceremonial bloodletting, which will be discussed more fully later. Suffice it to say here that the adult men and women are stabbed in the arms (the men on the inside of the arms from the wrist to the elbow and the women on the outside of the arms from the elbow to the shoulder) with the dorsal spine of the sting ray. When the wounds from these

stabblings heal, there remain a series of decorative scars, which are both tribal marks and signs of adulthood. Although bloodletting occurs on other occasions, the scratches made in the skin then are usually so superficial as to leave no scars.

No age, sex, or status differences are manifested in hair styles. The only exception occurs in the case of young girls (*yukwáki*), who have their heads entirely shaved before undergoing the rites to make them eligible for sexual intercourse and marriage. Young children receive their first haircut in the tribal style the day after they are born.

Hair is cut by the women with a piece of bamboo. There are no specialists who perform this task. A woman usually cuts her husband's and her children's hair, and her own is cut by a sister or a cowife. The hair is cut to a length of about a quarter of an inch all over the head. That over the forehead is pulled out, or shaved with a bamboo knife, to a very high semicircle. The ears are left exposed. In the back, the hair is cut straight across at about the level of the lobe of the ear. Haircuts are given about once a month, although the forehead and eyebrows may be depilated as often as every 10 days. For depilation the woman covers the tip of her index finger with beeswax and grasps the hairs between her thumb and index finger. After the hair has been removed, the entire forehead is covered with uruku, which acts as a healing balm. In the case of young children, to promote the future growth of the child's hair, a few feathers of the harpy eagle or the curassow may be glued to the back of the hair after it has been cut.

The disposition of hair clippings varies with age. In the case of young children the hair is saved, wrapped in cotton string, covered with hot beeswax, and tied around the neck of the child or his mother. The purpose of this is to promote the future growth of the child's hair and also to prevent the child from becoming sick in the head. In the case of adults the hair is thrown away deep in the bush, although I also observed in Casarabe that it was sometimes buried in the ground just outside of the house. Informants told me that leaving old hair around was apt to cause headache. Nail clippings receive no special treatment.

Beards are more rarely cut than the hair, but occasionally they are shaved off completely to

promote the growth of an even longer beard. Mothers sometimes glue a few beard hairs of the paca into their boys' hair to insure that their infant sons will possess a heavy beard like a paca when they become adults. Hair from the beard, like that from the head, is discarded in the bush or buried. The same may be said of axillary hair, which is removed when present. On the whole, however, the Siriono possess little body hair, and most of what they do have is rubbed off by the brush of the forest. Pubic hair is never removed.

PROPERTY

The native concept of property may best be expressed by saying that the environment exists for the exploitation of all members of the band, and that the society recognizes the rights of ownership only so far as this exploitation is pursued. In other words, the preserve of the Siriono is communally owned, but its products become individual property only when they are hunted, collected, or used.

Actually, little real property exists. What does exist is limited to the immediate possession, by a family, of a garden plot, by virtue of having cleared and planted it, or to the right to collect from certain fruit trees, by virtue of having discovered them. When a man comes across a new fruit tree, he may mark it with a notch; this will give him the right to exploit it (for one season at least) while it is bearing fruit. Such rights, however, do not extend to hunting grounds, fishing sites, stands of arrow reeds, uruku trees, or calabash trees, all of which are regarded as public property. The house is both communally built and communally owned.

Since the material apparatus is sparse, holdings in movable property are few. As regards all of these possessions, however, individual rights of ownership are recognized and respected. Thus a man is owner of his bows and arrows, the animals which he kills, the maize or manioc which he raises; a woman is the owner of her pots, cala-

bashes, baskets, necklaces, feather ornaments—in fact, all of the things which she herself makes or collects. In some possessions, such as pipes and hammocks, which are used by both the husband and the wife, ownership, of course, may be regarded as joint.

The sparsity of material culture limits transactions in property largely to exchanges in food. However, these are not carried out on the basis of barter, or buying or selling. Such notions are foreign to the Siriono. Nevertheless, the giving of food does involve an obligation on the part of the recipient to return food to the donor at some future date. For instance, if a man hunts a tapir, which he is forbidden to eat for magical reasons, part of the meat may be distributed to members of his wife's family. The next time the recipients hunt tapir they will be expected to return meat to the original giver. This type of exchange is about the only property transaction that takes place in Siriono society. Marriages and divorces, for example, are not accompanied by an exchange of property. Borrowing or lending almost never occurs; one's neighbor rarely has anything that it would be useful to borrow.

As a consequence of not accumulating property—a notion foreign to the Siriono—the problem of inheritance is greatly simplified. Actually, it hardly exists, for when a person dies most of the things with which he has had intimate contact are placed with the body or thrown away. Thus one's pots, calabashes, pipes, and feather ornaments are left at the site where the body is abandoned. Exceptions include hammocks, necklaces, cotton strings, and sometimes a man's arrows, particularly if he has been a good hunter. These may pass to his son or to his brother, while the few possessions of a woman usually pass to a sister or a cowife, though they may also be inherited by a daughter. Thus inheritance of possessions may be either patrilineal or matrilineal, depending upon the objects and persons involved. Succession to chieftainship, however, follows patrilineal lines.

EXPLOITATIVE ACTIVITIES

SEASONAL CYCLE

In contrast to most other aboriginal peoples of the area in which they live, the Siriono are semi-nomadic forest dwellers who live more by hunting,

fishing, and gathering than they do by farming. All of their economic activities, of course, are governed to a considerable extent by the seasonal changes which take place throughout the year. During the periodic inundations which last from

December to May, when the whole area, except for small islands of high ground, becomes one huge swamp, the mobility of the group is considerably impaired. Consequently, at the beginning of this cycle a stretch of high ground containing an abundance of palm trees and wild fruits is selected for occupation during the flood months, and the wild fruits are harvested as they mature. Such hunting as is possible (considerable game is attracted by wild fruits) is done, but fishing becomes a negligible activity, since the waters become turbid. The diet at this season of the year consists principally of wild fruit and vegetable food, and the band is a fairly cohesive social unit.

In sharp contrast to the sedentary mode of life during the rainy season is its nomadic character during the dry season. After the crops have been harvested in April and May and after the waters have begun to recede in June, the entire band may

start out on a hunting and gathering expedition, wandering from lake to lake, from stream to stream, exhausting the wild life of each as it travels. Consequently, meat, fish, and wild honey become more prominent in the diet at this season of the year, and the band becomes a loose social unit.

When the next rainy season arrives, the band may return to the same spot occupied the year before or it may move on to another. This depends largely on the quantity of food available. Having wandered for years over the same large area, the Siriono possess many sites containing old gardens, uruku trees, calabash trees, etc., to which they may return from time to time in their wanderings.

Table 1 is a calendar of the chief economic activities carried out and the principal foods eaten throughout the year.

TABLE 1.—*Calendar of chief economic activities and principal foods eaten*

Month	Activities	Foods eaten
January.....	Hunting and collecting; little or no agricultural work; group usually sedentary because of the rainy season.	Game; palm cabbage; motacú fruits.
February.....	Hunting and collecting; harvest of maize planted in November; harvest of wild fruits begins; group sedentary because of rainy season.	Game; palm cabbage; motacú fruits; papaya; maize; some manioc; coquino; aguaf; hindoera; gargatá; pacáy; pacobilla.
March.....	Hunting and collecting; no agricultural work; principal harvest of wild fruits; group sedentary because of rainy season.	Game; palm cabbage; motacú fruits; papaya; maize; some manioc; coquino; aguaf; hindoera; gargatá; pacáy.
April.....	Hunting and collecting; group still sedentary; harvest of wild fruits almost over; little or no agricultural work.	Game; palm cabbage; motacú fruits; papaya; coquino; aguaf; little maize and manioc.
May.....	Hunting and collecting; harvest of chuchio begins; making of new arrows; group begins to be more nomadic; possible replanting of maize.	Game; palm cabbage; motacú fruits; little manioc; maize and papaya.
June.....	Hunting and collecting; extended families become more nomadic; hunting expeditions; fishing begins; harvest of chuchio terminated; almost no agricultural work; band as a whole may decide to migrate to other spots for better hunting and fishing.	Game; palm cabbage; motacú fruits; little manioc; maize and papaya; some fish and wild honey.
July.....	Usually on the march; hunting and fishing; no agricultural work.....	Game and fish; palm cabbage; wild honey; motacú fruits; cusí nuts; some camotes.
August.....	Usually on the march; may return to eat camotes and fresh maize planted in May; hunting, fishing, and collecting chief economic activities; drinking parties occur because of abundance of wild honey.	Game and fish; palm cabbage; wild honey; camotes; maize; cusí nuts; motacú fruits; also a fruit called <i>ndia</i> .
September.....	Usually on the march; hunting, fishing, and collecting; many drinking parties.	Game and fish; palm cabbage; wild bee honey; motacú fruits; camotes; little manioc or maize; turtle eggs.
October.....	Hunting and collecting; clearing small plots for planting; during this month the group usually selects a site to weather the rainy season.	Game; fish; palm cabbage; motacú fruits; some camotes; little manioc, maize, or papaya.
November.....	Hunting and collecting; most of the planting occurs in this month; maize, manioc, cotton, and tobacco are sown; since agricultural activities are limited, they interfere little with hunting and collecting; fishing stops because the waters begin to rise and become turbid.	Game; little fish; palm cabbage; motacú fruits; few other vegetable products.
December.....	Rainy season begins in full force; no agricultural work; hunting and collecting are the only important activities; wild fruits have not yet begun to ripen.	Game; palm cabbage; motacú fruits; few other vegetable products.

HUNTING

No other activity of the men can match the importance of hunting. The temper of the Siriono camp, in fact, can be readily gaged by the supply of game that is daily being bagged by the hunters; there is rarely ever equaled that joy which follows a successful chase or that discontent which follows an unsuccessful one.

Around every Siriono hut there are trails, scarcely visible and marked only by an occasional bent leaf or twig, spreading out in all directions. On any morning just before daybreak it is a common sight to see the naked hunters, bows and arrows over their shoulders and perhaps with a piece of roast manioc in their hands, silently fading into the forest in all directions in quest of game. Some go alone; others in pairs; still others (as many as six or seven) may join together to go in quest of a troop of peccaries or a band of spider monkeys.

Besides his bow, each hunter takes with him about eight arrows—five with a barbed chonta head to hunt small tree game and three with a bamboo head to hunt larger ground game. As he leaves the hut the hunter walks silently but rapidly through the forest so as to arrive early at those spots such as water holes most likely to contain game, and as he goes along he searches the branches above him and the forest around him for a stirring leaf or a snapping twig that might indicate the presence of game.

Almost all animals of the environment except snakes are hunted, and various techniques are employed to bag game, depending upon the type of animal one encounters. Since the bow and arrow must be depended upon exclusively, and since the quarry must be close to be shot with such a cumbersome weapon, the Siriono is a master at both stalking and imitation. He can imitate to perfection the whistle of a bird, of a monkey, of a tapir, or the call of a peccary. There is not an animal sound of the forest, in fact, which he does not know and is not able to skillfully imitate. In hunting guan, for instance, he whistles like one of the young; if there is a guan within hearing, it is brought within range of the bow by this means. I have frequently seen guan brought to a branch within 10 feet of a hunter, and on one occasion, during the mating season, I saw one brought so

close by this method that it was actually caught alive in the hunter's hand.

So as not to disturb his quarry, a hunter refrains from talking when in quest of game and communicates with his companions largely by whistling. This specialized language has become so highly developed among the Siriono as to enable hunters to carry on limited conversations, and it is often used to advantage. On one occasion, when I was hunting with two Indians along the banks of a brook, my companion and I, who were on one side, suddenly heard a whistle from the opposite bank, along which the third member of our party was walking. We stopped immediately and my companion answered the whistle, to which the other replied in turn. After several moments of whistling conversation my companion selected an arrow, put it in his bow, walked a few feet ahead, aimed into a tree, and released the arrow. Down fell a curassow, much to my surprise. What had occurred was that our comrade on the other side of the brook could see the bird, which was not visible to us, but it was out of range of his bow. As it was possible for us to get in range, he indicated by whistling the location of the bird, so that it was relatively easy for my companion to walk to the spot and shoot it.

Other types of cooperation between hunters have developed because of unusual circumstances encountered in the jungle. The area, for instance, contains many tall trees in which game is sometimes situated at such a height that it is out of range of the bow. If a hunter is alone he will usually be forced to pass up such game, but if a companion is with him they may cooperate in making an effort to secure it. This is done in the following manner. One of the hunters slings his taut bow over his back and climbs up the tree to a branch that is within range of the animal. If the trunk is of such thickness as to prevent him from climbing directly up the tree, a sapling is cut and bound to the trunk with liana. He then climbs this sapling until the branches of the tree can be reached. Once in position to shoot the animal, he signals to his companion below, who puts an arrow into his bow and releases it with just enough force to reach the hunter aloft. The latter, as the arrow goes by, grabs it, puts it in his bow, and shoots the animal. This is by no means a common method of hunting and is practiced only in case the animal in the tree is one

not likely to move, such as a female howler monkey whose male companion has been killed. However, I witnessed it several times while I was living with the Siriono, and in each instance the game was bagged.

The animals most frequently bagged are monkeys, of which there are several kinds in the area. Most abundant is a species of capuchin monkey, called *keN*. If a hunter comes back from the chase with anything, he is most likely to have one or two *keN* in his catch. These monkeys travel in groups as large as a hundred, and, as there are always many young ones in the band, their whistling can be heard from a great distance away. Upon hearing these sounds, the hunter stops and whistles like the monkeys (I was never able to distinguish the whistle of a monkey from that of a hunter), gradually bringing them closer to his post. By hiding behind a tree, he is usually able to shoot one or two before the rest of the band sees him, becomes frightened, and begins to disperse. When this occurs, he selects one of the larger monkeys and gives chase, trying to drive it into the open where it can be shot. If in flight the monkey hides momentarily in the thick foliage above, the hunter tries to rout it out by tugging on one of the lianas which grow to the ground from almost every tree. Getting into position to shoot one of these monkeys, however, is not easy, as they move from tree to tree with great rapidity and stop only momentarily. Moreover, the underbrush below is extremely dense with lianas and spines, so that a hunter's progress is often impeded to such an extent that he loses his prey.

Next in abundance to the *keN* are the long-haired, black spider monkeys called *erúbat*. These are more highly prized than the *keN* because of their size (10 to 20 pounds). Spider monkeys are especially valued during the rainy season, because at this time they are very fat from eating the wild fruits that mature in February, March, and April. Sometimes these monkeys have as much as a half-inch of fat on their bellies.

Spider monkeys are chased and bagged in the same manner as the above-mentioned *keN* but are less difficult to shoot because of their greater size and sluggishness. They often await their fate, shaking the branches of a tree at the hunter. Nevertheless, they may cause the hunter a considerable amount of trouble, since they generally

break his arrow between their hands when dying and, once dead, they are able to hang to a branch with their strong prehensile tails for as long as 24 hours, thus forcing the hunter to climb the tree to retrieve them.

A third type of monkey that contributes considerably to the food supply is the howler or *téñdi*. Unlike the spider monkey, the howler does not travel in large bands but in polygynous family groups that vary in size from a male and two females to a male and six females. When hunting the howler, an Indian usually tries to bag the male first; the females will not then move from the area, and he can hunt them down one by one. After the male has been killed, the females often cluster together high in a tree, from which they do not move, and the aforementioned method of cooperative hunting can be applied to kill them.

In addition to the types of monkeys already mentioned, there are three smaller varieties that the Siriono occasionally hunt but which do not contribute much to the food supply. These are a small owl monkey, called *yikína*, and two varieties of squirrel monkeys, called *gñeti* and *ngí*. They are hunted in the same manner as the others, being chased from tree to tree until they are bagged.

Next in importance to monkeys in supplying meat for the camp are the numerous land and waterfowl of the area. These include, chiefly, several varieties of guan (*yáku*), curassow (*bítóN*), macaw (*kirinde*), toucan (*yisádi*), parrot (*yikána*), duck (*yéi*), cormorant (*miNgwa*), partridge (*námbu*), hawk (*ngída*), egret (*gwaríši*), and vulture (*urúbu*). On the pampa there are other large birds, such as the South American ostrich (*ngidáčibaia*), but as the Siriono with whom I lived were strictly a forest people, these were never hunted. All birds are shot with the bow and a barbed, chonta-headed arrow. They are usually brought into range by careful stalking or by imitating their calls.

The pursuit of the collared peccary (*tai*) and the white-lipped peccary (*éíasu*) constitutes an important part of the chase and contributes much to the meat supply. The former, which are usually observed foraging in the forest in groups of from 2 to 10, are quite abundant, and the latter, which are sometimes found in bands of as many as 200, are not infrequently encountered.

Collared peccaries are usually heard rooting

nearby as one goes through the forest. Upon discovering them the hunter prepares his bow for the kill, imitates their call, and shoots them as they come within range, aiming for the heart or the neck.

White-lipped peccaries can be discovered a great distance away, both by smell and sound. Moreover, they are one of the few animals that the Siriono spend days in tracking down and are also one of the few that are sometimes hunted cooperatively. As band peccaries are accustomed to follow a leader, and to root up almost everything as they go along, to track them down is not a difficult task.

To originate a cooperative peccary hunt some hunter must previously have sighted fresh tracks relatively near camp, say within a half day's distance on foot. On the day following the report, the hunters set out, using the person who discovered the trail as a guide. They take with them only their bamboo-headed arrows (*tákwa*), as only these are effective in killing such a large animal. Arriving at the trail, they follow it until they can hear the noise of the peccaries, which is not unlike the sound of distant thunder—the reason perhaps that the Siriono have associated thunder with the falling of peccaries to the earth.

After the band has been discovered, the hunting party stops and lays plans for the kill. If the chief is present—he is always one of the best hunters—other members of the party usually accept his method of attack. A band of peccaries is always approached against the wind, so that the hunters will not be discovered. If it is possible to come up from behind the band, this is considered the best strategy. In any case, an attempt is always made to circle the band so as to kill as many peccaries as possible. Some hunters approach from the rear; others from either side. The signal for the kill is given by the hunter first getting in position to shoot: the arrows then begin to fly from all directions. Each hunter usually picks a fat peccary for his first arrow. If possible, the leader of the band is also killed, not only because it is generally the biggest boar but because the band will thus have greater difficulty re-forming and the other peccaries will be easier to kill.

On a chase of this kind a hunter usually uses up all the arrows he has brought with him, but if

there is still game around this does not deter him from continuing the hunt. He may continue the attack with a club picked up at random or cut in the forest. I have even seen hunters catch young peccaries with their hands and bash their heads on the nearest tree or drown them in a water hole that happened to be at the site of the kill.

After the band has dispersed and the principal kill has been made, strays are run down and slain. It is only after no more animals are available that the slaughter is stopped. The hunters then meet at the place where the kill began, dragging all the game to that spot. If the day is yet young, i. e., before noon, if the kill is such that it can be carried home, and if the camp is not far away, they may set out for the house at once. Usually, however, they decide to remain overnight in the forest and roast the meat. If it is late in the day, they spend most of the night preparing and roasting the game, and on the following day, after an all night feed, carry the roasted meat to the camp in rude *motacú* palm baskets. In case raw game must be left in the forest for a night, the viscera are removed, and the carcasses, covered with palm leaves, are tied in a tree to safeguard them from ants and jaguars. On the following day the women are sent to bring in the game.

The Siriono who wander in those regions west of the Rio Blanco, where there is open country, frequently encounter the large pampa deer (*kiikwandúsu*). Those who inhabit the forest country east of the Rio Blanco most often meet a smaller variety of forest deer (*kiikwa*).

When in quest of the pampa deer, the hunter tries to reach the pampa as early in the day as possible. On arriving at the open country, he may sight his quarry a great distance away. Deer are relatively easy to stalk, as the tall grass of the pampa (frequently higher than one's head), as well as the ant hills, provide an almost perfect blind. The naked hunter must proceed cautiously, however, else the knifelike blades of some of the pampa grasses will cut his skin to ribbons. In killing deer the hunter always aims for the heart.

The tapir (*eakwantúu*) is the largest animal in the area, and since its carcass yields the greatest amount of meat of any animal, it is considered the greatest prize of the chase. Because of the undeveloped hunting techniques of the Siriono, and because the tapir does most of its feeding at night, when the hunter is fast asleep, it is rarely

bagged. Only four were killed by the Indians at Tibaera during my residence of about 8 months, although many more were shot.

Even at daybreak, when the hunter is alert, the tapir has already retired to sleep in the spiny, liana-covered underbrush into which it is difficult for the hunter to penetrate, and since he possesses no dogs to rout his prey, he rarely runs across one in his wanderings. Moreover, a tapir is hard to kill and, when discovered and shot, frequently escapes into a swamp where the pursuer dares not venture.

The few tapirs that are killed are usually shot while they are asleep. They are often detected by a short shrill whistle which they make at this time. They may also sometimes be located by the call of a small bird, known to the Siriono as *eakwantúi iča*, which accompanies the tapir and lives largely by eating the wood ticks from its body. The call of this bird is a clear sign to the Indian that there is a tapir not far away. Once the sleeping animal is discovered, the hunter sneaks up quietly to within a few feet and shoots it in the heart with a lanceolate bamboo-headed arrow. If a feeding tapir is discovered in the daytime, the hunter conceals himself in the brush nearby and whistles like another tapir until the animal comes within range of his bow. He then aims for the heart and having released his arrow gives rapid chase until the bleeding animal falls.

The alligator (*yikári ekwásu*) is one animal which is truly abundant in the area, particularly during the dry season when the waters are low and when they lie on the sand banks to sun themselves or come further inland to lay their eggs.

Alligators are hunted both with a bow and arrow and with a club. Arrows are employed when alligators are in the water with their heads up for air; clubs, when they are lying in the open sunning themselves. When shooting an alligator, which is difficult to kill, the hunter aims either for the eye or for the region just back of the shoulder. After being hit and thrashing around for some time in the water, the animal usually comes to the surface and can then be retrieved. If not, the hunter may wade in, taking with him an arrow to locate the beast by feeling around on the bottom. Once the animal is located, the hunter goes under water, grasps it by the tail, and slowly drags it ashore. As these reptiles sometimes live for an hour or two after they are shot, considerable time is allowed

to elapse before any attempt is made to retrieve them. In case they are encountered in the open they are clubbed on the head until dead.

Newborn alligators are sometimes used by hunters to attract the mother. When a young alligator is caught it begins to cry for its mother, who, upon hearing it, comes running out of the water to retrieve it. The hunter, waiting on shore, strikes the mother over the head with a club as she comes up the bank. By imitating a young alligator a hunter can often produce the same result.

Alligator hunting is regarded as a precarious business, and the hunter takes care so as not to get bitten. While I was living at Tibaera an Indian named Eabokóndu (Father-of-Long-Hair), while fishing at the edge of a lake, was surprised by an alligator and bitten on the upper leg. He saved his life by jabbing the point of an arrow into the alligator's eye, but was left with a nasty wound that did not heal over for several months.

Coatis are generally killed in the trees with barbed chonta-headed arrows. When a troop is discovered, a hunter is rarely able to kill more than one before the rest of the band takes to the ground in flight. When this happens, the hunter drops his bow and arrows and gives chase through the brush. I have seen coatis overtaken in this fashion. They are seized by the tail and their heads bashed on the ground, or they are hit with a club picked up at random. Not infrequently a hunter is bitten or gashed by the sharp eye teeth of the coati while making his catch.

The jaguar (*yákwa*) and the puma are rarely encountered in the forest. They are mostly found on the pampa. Only one large jaguar and three small ones were killed by the Indians while I was living with them. Jaguars are shot, either in the trees or on the ground, with bamboo-headed arrows.

The giant anteater (*antandíša*), being a slow animal, is generally killed with a club. Only in case one is discovered in a tree is it shot with a bow and arrow. The same may be said for the smaller variety (*antanbúja*). The honey bear when encountered tapping a hive of wild bee honey is shot with the bow and arrow.

Armadillos (*tátu*) are usually routed from their holes with a long flexible midrib of motacú palm, and are clubbed as they come out. If caught outside their holes they are shot in the head with an

arrow. The same methods are used with the paca (*titimí*). The agouti (*taiku*) is more generally shot while feeding on wild fruits which have dropped from the trees in the forest.

Most hunting is done individually or in groups of two or three. Game is carried in from the forest on the hunter's back. The animals are bound together with liana and suspended from the hunter's head with a tumpline of liana. Each hunter carries in his own game.

FISHING

Unlike many of his South American Indian contemporaries, who developed or adopted the fishhook, traps, nets, or poisoning as methods of catching fish, the Siriono does all his fishing with the bow and arrow. His less developed techniques consequently shut him out from a large supply of fish that is found in the area, and has limited fishing largely to the dry season, the months of July, August, September, and October, when the rivers and lakes are low and the waters are clear. At this time there is an abundance of fish in the low waters around the rapids, and these are caught either by shooting them with the bow and a barbed chonta-headed arrow or by stabbing them with an arrow.

Although I have seen some 15 edible varieties of tropical fish, the Siriono rarely attempt to catch more than four: catfish, bagre, bentones, and yeyú. Occasionally, one of the larger fishes, such as the pacú, is shot when feeding on chonta fruits that have dropped into a river or stream, but this is rare.

Around the edge of lakes, the usual method of catching fish is to wait in the overhanging branches of a wild fruit tree that is shedding fruit on which the fish are feeding. As the fish come up to eat the fruits, which either fall naturally into the water or are thrown in by the fisherman, they are shot with the barbed chonta-headed arrow and pinned to the bottom. Since the arrows are very long and the branches are low, the hunter to retrieve his catch merely reaches down and extracts the arrow, the fish being held by the barb. With patience and by occasionally changing his position a man can shoot as many as a dozen fish in a day by this method.

Another source of fish, and perhaps the principal one, are the small ponds and streams which fill up with water and fish in the rainy season but

which dry up in the dry season and offer the fish no means of escape. When the waters are drying, the fisherman walks through a pond catching the fish with his hands, stabbing them with an arrow, or hitting them on the head with a stick.

Although almost all of the Siriono today possess fishhooks, I rarely saw them actually used. Since they have no watercraft of any kind, it is impossible for them to reach the deep water where a fishhook would be of special advantage to them. Moreover, since they are not a river people, and since most of their camps are inland, fishing is not an important activity nor does it contribute much to the food supply.

COLLECTING

In the total economy, collecting ranks next to hunting in importance. This activity is participated in by both the men and women, and since much of the collecting is done by nuclear families, children get an early education in spotting and gathering edible products from the forest. Although women and children do considerable collecting while the men are off hunting in the forest, when it involves tree climbing they are always accompanied by the men. Now that iron tools have been introduced, many of the wild fruit trees of the area are being destroyed, because the natives find it easier to cut them down than to climb them when harvesting fruits.

Of all of the products collected, palm cabbage (*kišía*) is the most important. Practically all of the palms of the region yield an edible heart, but motacú is the most abundant and one of the easiest from which to extract the *kišía* (the tree is always cut down). It provides a constant source of vegetable food. This palm, moreover, produces a fruit (*yukúdi*) about the size of an egg, which grows in bunches, and which also forms an important staple in the diet the year around. When pickings are especially slim these two products, although not very nourishing, can always be relied upon to tide the Indians over until a more substantial diet can be obtained. As we shall see later, the importance of the palm cabbage is reflected in the magical aspect of the culture, its collection by women being occasionally preceded by a magical bloodletting rite.

Other palms, besides yielding a comestible heart the year around, also bear fruits which mature in a more seasonal cycle than the motacú. During

February, March, and April, the small red fruits of the chonta palm (*siriba*) are collected. At this season of the year the Indians also devote themselves to gathering the fruit of a palm not unlike the motacú which they call *hindoéra*. In extracting these fruits, which grow in bunches, the tree is climbed and the cluster pulled down.

During the months of July, August, and September there is an abundant harvest of the fruits of the samuque palm (*tiba*) and of the nuts of the cusi palm. These latter, which are usually collected on the ground after they have fallen from the trees, are one of the most nutritious wild foods found in this part of the Amazon Valley. The fruits of the assaí (*tibaéra*) and the totaí (*korondia*) palms, which are extensively used by the whites of the region for making wine, are not collected by the Siriono with whom I lived.

In addition to the above-mentioned palms, there are many other fruit-bearing trees which seasonally add their crops to the Siriono food supply. Predominant in the months of February, March, and April are the fruits of the coquino (*iba*), the aguái (*ibadiša*), the gargatêa (*dikišia*), pacây (*iNga*), wapomo (*asambákwa*), pacobilla (*idayá*), cocáo (*ibíro*), balláu (*jičiba*), and paquió (*tibári*), as well as unidentified wild fruits which the Siriono call *mbéa*, *tikaría*, and *tarúma*. There is only one other fruit of any importance gathered in the dry season. This is an acid fruit known to the whites of the region as *mbís* and to the Siriono as *ndia*.

In collecting wild fruits the men climb the trees and throw them down to the women waiting below. This often entails considerable work as the trees are sometimes of such size that it is necessary to lash saplings to them in order to climb them, and it is frequently hazardous since a man is liable to fall from a branch while picking the fruits. If the fruits are not located too high in a tree, however, a man may fashion a rude hook by bending over and binding with liana the top end of a midrib of a motacú palm leaf, which can then be used to pull the fruits down from the tree. People usually eat their fill at the site of a fruit tree before loading their baskets to carry back to camp.

The digging of roots and plants and the grubbing of worms are almost negligible occupations among the Siriono, and provide hardly any part of the diet. The same may be said for the collect-

ing of insects, which was never done insofar as I observed. Certain varieties of shelled invertebrates—a mollusk called *urúkwa* and a mussel called *yisíta*—exist in the region, but these are likewise not sought for food, although their shells are gathered for tools. Several species of tortoise (*konómbi*) are extensively collected for food. These are highly prized, as they can be tied up and cooked when desired.

Like other tropical forest Indians the Siriono are fond of extracting the honey (*hidou*) of wild bees, which is the only "sweet" they possess. It is relished not only as food but for the making of mead as well. Honey is avidly sought, especially during the dry season when it is most abundant. In searching for honey, the Siriono do not go so far as to follow bees to the hive, but men out hunting, or collecting with the women, are most skillful in spotting wild beehives, which are usually located in hollow trees that are still standing. If the honey is not extracted when sighted, the person finding it returns later to do so.

In extracting honey the tree containing the hive may or may not be cut down. In any case, a hole is made—nowadays with an iron ax—below the spot where the honey is located. The combs are then removed with the hands and the honey wrung from them into calabashes. Before the introduction of iron tools, the hole where the bees entered the hive was enlarged by using fire and the chonta digging stick. The removal of a hive of wild honey often took as long as an entire day. Besides collecting the honey from the hive, the Indians save the beeswax, which is prepared for use as cement in arrow making.

AGRICULTURE

Although agriculture has been practiced for many years by the Siriono (they may originally have been a strictly nomadic people), it has never reached a sufficient degree of development to prevent their remaining a fairly mobile people. On the whole, its practice is subsidiary in the total economy to both hunting and collecting. One of the reasons for this may be that the game supply of an area becomes scarce before the rewards of agriculture can be reaped, thus entailing a migration of the band to other areas to search for game. Moreover, the sheer physical effort involved in adequately clearing a patch for planting is enor-

mous, as all labor of this kind is done with the digging stick and fire. Hence the Siriono have doubtless experienced greater rewards from the collecting of wild vegetable products and fruits, some of which, as we have seen, are available and abundant the year around, than they have from the practice of agriculture, whose yields are sporadic and uncertain.

At the time of my stay, the Siriono with whom I lived under aboriginal conditions were planting the following crops on a limited scale: maize (a soft red variety, unique in the area), sweet manioc, camotes, papaya, cotton, and tobacco. Here and there throughout the area of their wanderings, they have also planted calabash and uruku trees. According to one of my oldest and best informants, Embúta (Beard), both calabashes and tobacco had been introduced in his lifetime, which would be within the last 50 years. Of the other plants, however, he emphatically stated that his father had told him that they had been given to the tribe by Moon (the mythological hero) and were thus very old in Siriono culture.

No magical practice accompanies either the sowing or the harvesting of crops, and what planting is done is largely a family affair and not an activity in which all members of the band cooperatively participate. Both man and wife work jointly in clearing and burning over a small plot, frequently just outside of the house, in which they sow, also cooperatively, a few plants or seeds of maize, manioc, papaya, camotes, cotton, and tobacco. These plots are seldom over 50 feet square, and most of the work in them is done with the digging stick, the only agricultural tool. Today, of course, machetes are commonly employed in clearing a plot, but the digging stick is still extensively used in planting.

Little attention is paid to the time of year in sowing, although more sowing is done at the beginning of the rainy season than during the dry season, probably because the group is less mobile during wet weather. However, I saw maize, manioc, papaya, and tobacco planted the year around. Camotes, on the other hand, I saw planted only during March and April, these being harvested in July and August. Once plants are sown little attention is paid to them until harvest.

Although a more or less permanent Siriono hut is encircled by familial garden plots, by no means are all gardens planted just outside of the

hut. A hunter who is accustomed to going periodically to a certain lagoon, for example, to hunt or shoot fish, may plant a small garden there so as to have vegetable foods available when he returns on subsequent trips. I used to make hunting trips with my friend and informant, Erésá-eánta (Strong-eyes), and his five wives and children to a lagoon about 2 days' journey on foot south of Tibaera, where he had maintained garden plots for many years. These hunting parties, which frequently included his two brothers and his fathers-in-law and mothers-in-law and their families, would often last 2 weeks, during which time we would make our headquarters at his gardens. While the men hunted around the lake, the women would tend the few plants and gather what produce they had yielded. Other hunters maintained similar plots on other lakes and would frequently repair to them with their families to hunt, tend their gardens, and eat. Excess produce, such as a harvest of maize, is sometimes stored at the site in rude motacú baskets, so as to have a supply available on the next trip. Generally, however, little movement takes place until most of the crop has been eaten because of the difficulty of carrying it any great distance or the uncertainty of returning to the same spot for some time afterward.

ANIMAL HUSBANDRY

The Siriono possess no domesticated animals. Even the dog has not been introduced to the groups still wandering in the forest, although its existence is known through some individuals who have had contact with the outside. The general reaction to the dog, by those Indians who had had no contact with it, was one of extreme fear. This is not to be wondered at since the dog and the jaguar are called by the same term, *yákwa*. When I asked informants why the two were called by the same name, they invariably called my attention to the similarity between the footprint of a jaguar and that of the dog.

Although domestication is an art foreign to the Siriono, the young of various animals are sometimes captured alive and brought home as pets; under such conditions, however, I have rarely seen them live for more than a day or two, as they are very roughly handled by the children and are given no food. Consequently, they serve as morsels for some old man or woman for whom

pickings are slim. Generally, the young of animals are killed immediately after the mother is killed. I was told by informants at Casarabe that young animals were sometimes raised to adulthood and then killed for food, but while living with the less acculturated groups I never saw a single instance in which this occurred. When we were settled at Tibaera, for example, I myself tried to raise several howler monkeys, a coati, a young tapir, and a baby anteater—never, however, with any success, because they were soon killed and eaten by their Indian wards. These would then give me some such excuse for their dying as having been smothered by smoke in the night or having escaped into the forest. In all instances, I was

able to establish that they had been killed and eaten while I was absent.

WATER AND FUEL

There are plenty of rivers, lakes, and streams in the territory of the Siriono that contain a fresh supply of water the year around. Even when one is traveling through the bush during the height of the dry season one can usually find a water hole, a stream, or a brook from which to drink. Camp sites are always located near these spots. No wells are ever dug.

There is likewise no shortage of firewood. The forest is full of dead and rotten trees that make excellent fuel.

FOOD AND DRINK

Two of the most frequent expressions that one hears around a Siriono shelter are: "*šediákwa túti*" ("My stomach is very empty") and "*ma nde šeri*" ("Give me something"). To the latter may be added an appeal for some delicacy, such as a piece of tapir or peccary meat, a bit of wild bee honey, or whatever else to eat someone may have around. But since the attention of the Siriono is most frequently and forcibly focused on his stomach, requests for anything but food are rare. Not infrequently the unlucky hunter, while resting from an unsuccessful chase, is reproached by his wife for not having brought home more game, and, invariably, as one leaves for the hunt, the women and children call after him such commands as "Bring me back the leg of a peccary" or "Bring me back some tapir meat."

DIET

The environmental and cultural conditions which exist among the Siriono are most favorable for giving rise to a strong anxiety about questions of food. It would seem, in fact, that of all the basic drives demanding satisfaction for survival, hunger is the one most frequently frustrated. The supply of food is rarely abundant and always insecure. Game is not plentiful; the techniques of hunting, fishing, and agriculture are very limited; patterns of food storage do not exist. Consequently, eating habits depend largely upon quantities of food available for consumption at the moment. When food is plentiful people eat to excess and do little else; when it is scarce they

go hungry while looking for something more to eat. Starvation, however, never occurs. There are times when the Indians go for days on a diet of motacú fruits and palm cabbage, but these seem to be adequate for subsistence until game can be hunted. I know of one instance in which a party of Indians survived for 18 or 20 days on a diet of nothing more than palm cabbage and a few wild fruits collected from the forest. Since they were on the march during this time, and were thus using up a great deal of energy, they exhibited definite signs of undernourishment after their journey.

While I was living at Tibaera, my attention was called one afternoon to the arrival of seven Indians (two men, two women, and three children) who appeared to be especially thin and emaciated. After giving them some food, I inquired as to the reason for their semistarved condition. One of the men told me that they had run away from the Government School at Casarabe, situated about a hundred miles east through an uninhabited forest and plain that contained no trails, and that they had been without food for "many" days. This struck me as strange, inasmuch as the men were carrying their bows and arrows and the lands through which they had come were known to contain considerable game, including wild cattle which occasionally stray from the herds that wander on the plains of Mojos. Their hunger, it turned out, resulted not from the lack of game but from a lack of fire. After leaving the school, they marched at a rapid

pace for a day or two to escape pursuit, after which they became so fatigued that while they were sleeping heavily one night their fires became extinguished. Since the Siriono have lost the art of making fire, and will not eat raw game under any conditions, this party was left with the alternative either of returning to the school and being severely punished for running away or of striking out in the direction of settlements which they knew to exist on the Rio Blanco and being rewarded by obtaining fire and freedom. While making the journey to Tibaera, they were reduced to a diet of a few plants and wild fruits which they found along the way, and because of the young children they were considerably impeded in their progress. Thus the journey, which would normally take about 6 to 8 days to complete on a full diet, lengthened to a period of 18 or 20 days because of the meager diet on which they were forced to exist. One of the men told me that if they had not arrived when they did they might well have starved to death.

Circumstances like those just mentioned rarely occur, but it is not uncommon for the Siriono to go for several days at a time without eating meat. My notes are full of statements to the effect that there was no meat in camp for periods of 2 or 3 days, and when I myself was on the march with the Indians, I passed, in common with my companions, many meatless days. The longest of such periods that I recall endured for 4 days, during which time we were reduced to a diet of cusi nuts, palm cabbage, and motacú fruits. At this time we were wandering through a particularly sterile piece of high ground on which no game was sighted. When we finally did run across a band of wild peccary late one afternoon, we were all so fatigued that we were unable to give adequate chase and thus bagged only about half as many animals as we might have killed under more favorable conditions.

While first living at Tibaera, I kept records of the amount of game hunted and consumed by the band for a period of 3 months—during August, September, and October, 1941. At this time there were about 50 adults living there, and no meat was being introduced from the outside. During August and most of October I kept the records myself, but during September and the first 8 days of October I was wandering with another group of Indians in the forest, and the

records were kept by a Bolivian employee of mine who stayed at Tibaera. The daily amount of meat hunted, by whom secured, and the approximate quantity, i. e., estimated gross weight, were noted. The exact distribution of the meat to each individual was impossible to record, but the distribution outside of the extended family was noted when it occurred. On the basis of the total population, the approximate consumption of meat per individual per day is shown in the following tabulation:

Month (1941):	Meat (in pounds)
August.....	0. 56
September.....	. 53
October.....	. 36

After my return from the forest in early October I was accompanied by 94 more Indians, so that keeping records of the amount of meat hunted and consumed by the entire group became so complicated and time-consuming that I was forced to abandon it. However, the figures above give a rough estimate of the quantities of meat consumed daily by the average Siriono. The noticeable decrease for the month of October was probably due to the fact that the Indians were more active in clearing land—to be planted in the month of November—than in hunting. Although I have no reliable data on meat consumption for the other months of the year, it is probably less during January, February, March, and April than at other times, because of the difficulty of travel during the rainy season.

The figures above represent the amount of meat hunted by the Indians with bows and arrows. The data, of course, are not strictly accurate, because the weight of the meat had to be estimated and the number of people present in camp was not always the same. During this period some hunters would be gone for 3 or 4 days at a time, when it was impossible to keep records of their catch, and on some days perhaps not all of the catch was recorded. But even allowing for a large margin of error, the average Indian probably eats less than a pound of meat per day.

During August there was no meat in camp for 11 days; in September for 9 days; in October for 12 days. The most persistent hunter was out for 16 of the 31 days in August, 12 of the 30 days in September, and 19 of the 31 days in October. The majority of hunters averaged from 10 to 12

days a month. To be sure, the conditions at Tibaera were not in all respects aboriginal. Informants told me, however, and my observations under aboriginal conditions seem to bear them out, that a man goes hunting on the average of every other day throughout the year. On the odd days he rests, repairs arrows, eats (if he has any food), etc.

While I was wandering in the forest with a group of Indians, when I too was hunting with a rifle and shotgun, the amount of meat consumed by the group rose considerably. I have records on this only for September 1941, a large part of which I spent on the march with parts of two extended families of Indians (21 adults in all) and one Bolivian companion in search of another band. During the first 11 days of the march, when most of the hunting was done with the rifle and shotgun, our meat consumption averaged 2.2 pounds per individual per day. After we had rested several days with another band and continued the march, our meat consumption jumped to 4.1 pounds per day for the last 15 days. I am inclined to believe that the increase was largely due to the fact that with a rifle and shotgun we were able to bag more big game, like tapirs, alligators, and peccaries, than the Indians would have been able to kill with their bows and arrows. Part of the increase, of course, may have resulted from the fact that we were wandering in areas richer in game than most and that we were hunting every day, but the superiority of the rifle over the bow and arrow was almost certainly a factor. When game was sighted, the Indians would almost always call on my Bolivian companion or me to shoot.

Although meat is the most desired item in the diet of the Indians, it is by no means the most abundant. Maize, sweet manioc, and camotes (when available) constitute a very important part of the food supply. Maize is eaten especially during the months of February and March. By the end of March the supply of maize, except for the few large ears that are saved for seed, has generally been exhausted. Sometimes, though rarely, maize is replanted in May to be eaten in July and August. Manioc, once planted, takes from 8 months to a year to mature. These restless natives seldom sow fields of any size, since they will often not be on hand to reap the benefits. Frequently in the Siriono territory one runs across old gardens containing edible stands of manioc

that had been abandoned before the product was mature. When available, however, manioc is eaten the year around. Camotes constitute a heavy part of the diet during July, August, and September. The supply is never great, however, and is usually exhausted soon after the harvest. Papayas are generally available in small quantities the year around because the plant readily grows wherever seeds are dropped. The Indians seldom plant papayas. From their habit of swallowing the seeds of the ripe fruit, new plants automatically spring up after the seeds are expelled in the excrement. The area surrounding an Indian hut is thus rich in papaya trees.

Supplementing the diet of meat and agricultural products are numerous varieties of wild fruits already referred to which mature during January, February, and March. These, coupled with maize, supply sufficient food for the semisedentary rainy season, when the meat supply is reduced.

Food seems to be scarcest at the end of the rainy season (May and June), when there are few available wild fruits and when the waters are still too high to allow extensive migration. It is also scarce at the beginning of the rainy season (November and December) before the maturity of wild fruits and agricultural products.

FOOD TABOOS

With the exception of snakes and insects, almost everything edible in the environment contributes to the food supply. The reason for not eating snake meat, however, does not rest on magical or religious grounds; the Siriono believe, since a snake is able to kill by poison, that anyone who eats snake meat is also apt to be poisoned. This taboo applies not only to all poisonous snakes, such as the bushmaster and the rattler, but is generalized to include even nonpoisonous anacondas, which often reach a length of 20 feet and could contribute considerable meat to the food supply.

I was presented with two favorable opportunities to break down the taboo on snake meat, but in both cases the experiments failed. In the first instance, I killed a bushmaster about 8 feet in length just outside of the house. Since I was badly in need of a waterproof pouch in which to carry my powder and shot, I decided to remove the hide and to try to make one. While skinning

the reptile, I noticed that it was particularly fat, and since I had no oil with which to keep my arms greased I decided to fry down some snake fat for this purpose. Also, since I had never had the opportunity, I decided to taste some of the meat. I made a point of frying a large steak in front of the Indians so that they could readily observe everything that was going on, and after this was done I sat down in a hammock and ate it in full view of the chief, who had not only warned me not to eat it but who, I am sure, expected me to drop dead at any moment. Fortunately, no ill effects resulted. On the following day I ate some more, but though I tried my best, I was unable to get a single Indian to try a piece of the meat. Some days later I had occasion to bake some corn muffins, and since I had no lard at the time I decided to make them with snake grease. After they were done the chief came around, and I offered him one. He began contentedly to munch it. After he had eaten about half, I could not resist the temptation to tell him that the muffins contained snake fat, whereupon he immediately jumped out of the hammock, put his finger down his throat, and threw up every bit of the muffin he had eaten. For weeks afterward he reminded me of the trick I had played upon him and was skeptical of eating any food that I offered him until he was certain that the snake fat was gone.

On the second occasion, my Bolivian companion, Silva, killed an anaconda of about 20 feet in length. Conditions for introducing snake meat at the time were favorable since little game had been secured for several days. But even under these circumstances, although I myself again set the example, I was unable to convince my Indian companions to try it. They showed no compunction, however, about either hunting or eating the buzzards which fed on the carcass of the snake, and for several days thereafter buzzard became a prominent part of their diet.

Apart from snake meat, bats, and a few poisonous insects there are few things the Indians refrain from eating. Although not constituting a prominent part of the diet, such things as head lice, wood ticks, and grubs are swallowed without compunction.

Theoretically, a man is not supposed to eat the flesh of an animal which he kills himself. If a hunter violates this taboo, it is believed that the

animal which he has eaten will not return to be hunted by him again. Continued breaches of this taboo are consequently supposed to be followed automatically by the sanction of ill-luck in hunting. This rule may formerly have been an effective mechanism by means of which to force reciprocity in the matter of game distribution, but if so, it has certainly lost its function today, for the disparity between the rule and its practice is very great indeed. Few hunters pay any attention to the rule at all, and when they do it is only with respect to larger animals, such as the tapir and the harpy eagle, that are rarely bagged anyway. In the case of smaller animals, such as coati and monkeys, I never saw hunters show any reluctance to eating those that they had killed themselves. Embúta, one of my older informants, told me that when he was a boy he never used to eat any of the game that he killed, but that nowadays the custom had changed and that it was no longer possible to expect meat from someone else who hunted it. It thus seems that through a gradual process of change hunters have discovered that eating their own game does not necessarily result in poorer luck in hunting but, rather, in greater satisfaction to the hunger drive. The reinforcing experience of eating one's own game has thus caused a partial break-down in an old tribal custom.

The few food taboos that do prevail among the Siriono have almost exclusive reference to the animal world. Agricultural products and wild foods collected from the forest are never taboo; they can be eaten on all occasions, by all age groups, and by both sexes. Free of all food taboos, including certain kinds of meat which are forbidden to others, are the aged, that is, those who have passed child-bearing age or possess grown children. Since the Siriono do not practice fasting of any kind, even ceremonially, the aged can thus eat anything at any time.

There are, in fact, certain meat foods that are supposed to be eaten only by the aged. These include the harpy eagle, the anteater, the owl monkey, and the howler monkey. Since the aged usually get only the left-overs of other food, the society thus seems to have provided for them in some way by reserving these animals exclusively for their use. Under conditions of need, however, I have frequently seen them eaten by people who were not supposed to eat them; only when

other animals are relatively plentiful are the taboos strictly observed.

Apart from the above-mentioned food taboos there are few others. Since these latter will be discussed on the occasions when they prevail they will not be mentioned here.

PRESERVATION AND STORAGE OF FOOD

The preservation of food is almost unknown. In this tropical climate fresh meat must be cooked within 8 hours after it is killed in order to prevent spoilage. The Siriono, moreover, have no salt with which to preserve meat, nor have they developed any techniques of drying and smoking meat to render it edible for more than 2 or 3 days. Considering the rude methods by which game is bagged, of course, the catch is rarely so large that it cannot be easily consumed within a day or two. If, however, the amount of game is greater than can be immediately eaten, the excess meat is left lying on a low platform under which a fire is kept smouldering to preserve it. It thus remains edible for about 3 days. But since no hunting takes place when one has meat on hand, the immediate surplus is never replenished. Hence even under the best of conditions the Indians can never be sure of possessing a meat supply for more than the 3 days that it can be preserved by their crude methods.

Foresight in another respect does exist. On hunting and gathering trips the Siriono like especially to encounter tortoises, because these can be collected and preserved alive over considerable periods of time. Tortoises are relatively abundant in the environment, and a lucky hunter may sometimes return with as many as 8 or 10 of them, each of which may weigh from 8 to 10 pounds. They can be tied up with liana and kept alive for about a week, thus insuring a man and his family a meat supply for as long a time. In instances of this kind, one or two tortoises are usually butchered each day. In the meantime the hunter spends his time eating and loafing and does not go out on the hunt again until the supply is exhausted. I have seen hunters who, under these conditions, rarely moved from their hammocks for an entire week.

Maize is the only agricultural product that is ever stored in any quantity. Immediately after each harvest the various families tie their surplus ears of maize (in the husk) on to poles in the shelter. At this time a few of the larger ears are

selected and put away in a basket for seed; the rest are gradually eaten until the supply is exhausted. Since crops are never very large, the surplus quantity of maize rarely lasts for more than a month after harvest. Thus, although two crops may be planted by a family during the year, maize is actually eaten in abundance for only about 2 months, that is, for about a month following each harvest.

Manioc and camotes also are not stored, nor is the former made into flour. Both manioc and camotes are dug from the ground and eaten as they mature. When manioc is extracted, a few of the tubers may be planted at the same time so as to have some plants constantly maturing, but under aboriginal conditions the supply of both manioc and camotes, like that of maize, is never very abundant, and when the crop is mature it is quickly exhausted. It is a rare family that has manioc to eat the year around (I never knew of one), or camotes to eat for more than a month or two after the harvest.

Wild fruits and other edible forest products are likewise never preserved or stored. Once the season of wild foods has passed they are not eaten again until the next season comes around.

With respect to the food supply in general it can be said that, except for certain agricultural products like manioc, maize, and camotes, reserves for more than 2 or 3 days are never built up. Fortunately the environment offers a constant source of some foods, like palm cabbage, so that even though hunger is often intense starvation is never imminent.

PREPARATION OF FOOD

Little care is taken in dressing game, which is done either by men or women. Animals with hair, such as monkeys and peccaries, are first singed whole in the fire, and the burned hair is then scraped off with the fingernails or with a small section of a midrib of a motacú palm leaf. The animal is then gutted with a sharp piece of bamboo after which the whole carcass is sometimes (but by no means always) perfunctorily washed before it is cooked. Birds are hastily plucked and then singed in the fire and gutted. If an animal is small it is usually cooked whole, but if it is too large for a pot (or too large to roast rapidly) it is quartered or cut up into smaller

pieces with a bamboo knife. Armored animals like the armadillo and tortoise are usually thrown in the fire and left there to roast in their shells. Fish are never gutted before they are cooked, nor are the scales removed.

The division of labor as regards cooking varies a great deal, depending upon the circumstances under which the food is being prepared. Everyone knows how to cook, even young children.

Cooking is an art learned very early in life. When traveling with his mother and father, a child is often given a cob of corn to roast, some motacú fruits to roast, or a morsel of viscera to cook for himself. In fact, whenever animals are being cut up, there are always young children (as often boys as girls) around, waiting for some tidbit, which they then take to a fire and roast for themselves. Such morsels they share with no one else.

While in camp, when the group is fairly settled, most of the cooking is done by the women. This is especially true if the preparation of the meal involves the grinding of maize or other vegetable products that are sometimes mixed with the meat and cooked in a pot. On the march, however, when pots have been temporarily stored and when most of the food is roasted, the men take as active part in cooking as the women. In fact, the roasting of meat often falls entirely to the men, especially since they may be off on the hunt several days without the women and thus be forced to barbecue the game before returning to camp.

No condiments of any kind are used in cooking. Even salt (no deposits of this product are found in the area) is unknown to the Siriono living under aboriginal conditions. Evidently the foods they eat contain enough salt to produce the hydrochloric acid necessary for digestion.

I introduced salt to some Indians for the first time, and they expressed a distaste for eating it. By using small quantities in cooking, however, they soon developed a craving for it. In some instances this craving (once the Indians have become accustomed to using salt) has become so great as to become an important factor in establishing and maintaining friendly relations with the whites. The late Frederick Park Richards, an American cattle rancher living near El Carmen,

who was one of the first white men to establish permanent relations with the Siriono in the Rio Blanco area, told me that when he first came to the region in 1912 he was able to maintain peaceful relations with the Indians for years before they permanently settled down with him on his farms in 1925 by conditioning them to eating salt. I myself, however, have traveled with primitive groups when all of us went without salt for as long as 43 days without suffering any apparent ill effects from such a diet.

Actually, little emphasis is placed on the preparation of food. Depending upon the time, place, type, and quantity of game, it may be roasted or baked in the ashes of the fire, broiled on a spit or babrecot, or boiled or steamed in a clay pot. Some vegetable foods, such as maize, are prepared by grinding before they are cooked, and, of course, many nuts and fruits are eaten raw.

The following is a list of foods and the ways they are prepared.

Foods:

Meats-----	Never eaten raw; always broiled, roasted, or boiled; sometimes boiled with maize, manioc, or camotes.
Fish-----	Never eaten raw; almost always roasted on babrecot with scales and guts; sometimes boiled.
Maize-----	Never eaten raw; roasted in husk when young and tender; roasted on cob when mature and hard; sometimes ground up and boiled with meat or made into cornmeal cakes.
Manioc-----	Never eaten raw; peeled and boiled, sometimes with meat; roasted in peel in hot ashes.
Camotes-----	Never eaten raw; boiled in peels, sometimes with meat; usually roasted with peels in hot ashes.
Papaya-----	Always eaten raw.
Palm cabbage-----	Eaten raw but frequently boiled with meat.
Motacú fruit-----	Never eaten raw; always roasted.
Nuts-----	Always eaten raw.
Coquino fruit-----	Do.
Chonta fruit-----	Always boiled.
Aguaf fruit-----	Always roasted.
Híndoéra fruit-----	Do.
Gargatúa fruit-----	Do.
Pacáy fruit-----	Always eaten raw.
Cacáo fruit-----	Do.
Ndía fruit-----	Do.

EATING

It is difficult to establish a schedule of meal hours among the Siriono because of the insecure nature of the food supply and the nomadic character of life. People eat when they have food, and under these conditions they are just as apt to eat during the night as during the day. In fact, more food is consumed at night than at any other time because hunters and collectors are away from camp most of the day and for reasons which we shall examine in a moment.

The principal meal is always taken in the late afternoon or early evening. Other eating is mainly of the between-meal type, and occurs at all hours of the day or night. I was constantly surprised to find, throughout my residence among the Siriono, that food which had been left over from an evening meal was invariably gone by morning. Frequently, moreover, after the evening meal has been eaten, a pot of food is put on the fire to cook during the night, and this, too, has usually disappeared by morning.

The habit of eating during the night grows not only out of the necessity of hunting and collecting during most of the day but also out of a reluctance to share food with others. When meals are taken during the day, a crowd of nonfamily members always gathers to beg for morsels, and though little attention is usually paid to them, they do, nevertheless, constitute an annoyance. By eating at odd hours during the night, when nearly everyone else is asleep, an Indian not only gets more food but also avoids the nuisance of having others around to beg it from him. While I was on the march with the Siriono, my Bolivian companion and I were forced to follow the same practice. We found that it was impossible to eat in peace during the day, because we were constantly hounded by children and adults who claimed that they were hungry. The fact that we, too, had not eaten made no impression on them. Consequently we ate the greatest portion of our food at about midnight, when almost everyone else was asleep. A few of my loyal Indian companions, who developed a certain interest in my welfare, used frequently to wake me in the middle of the night to share food which they hated to display during the daytime because of the possibility of their having to divide it with someone else. When we were settled—I then sometimes had a supply

of certain foods—it used to amuse me to note how my Indian friends would suggest that they come to my house and eat at night when the others would be fast asleep.

Strictly speaking, the Siriono possess no eating utensils. A broken calabash may sometimes be used to scoop food from a pot or even to eat from, but such utensils as plates and spoons are not manufactured. Generally speaking, everyone participating in a meal eats from a common pot. Chunks of meat, pieces of manioc, and the like are picked out of the pot with the hands, but when the meal consists of gruel or a soup the food is generally scooped out of the pot by using half-shells of motacú fruits as spoons. Food is also sometimes distributed for consumption by pouring it out on leaves of patujú, a plant resembling the banana. The distribution of food rarely goes outside of the extended family. Within the extended family, however, the distribution of food does not follow any strict pattern. Each nuclear family cooks its own food and the head of the house usually gets the back of an animal; his first wife the two hind legs. Other parts of an animal are usually distributed without reference to status within the family.

Eating takes place without benefit of etiquette or ceremony. Food is bolted as rapidly as possible, and when a person is eating he never looks up from his food until he has finished, so as to avoid the stares of begging onlookers. The principal goal of eating seems thus to be the swallowing of the greatest quantity of food in the shortest possible time.

Appetites for particular foods are few. There is a preference for meat over all other foods and a preference for fat meat over lean meat, but the cook book of the Siriono is almost devoid of recipes. I have seen a man eat hawk with as much gusto as partridge, and I never heard an informant speak disparagingly about any food regarded as edible by the Siriono.

The quantities of food eaten on occasions are formidable. It is not uncommon for four people to eat a peccary of 60 pounds at a single sitting. When meat is abundant, a man may consume as much as 30 pounds within 24 hours. On one occasion, when I was present, two men ate six spider monkeys, weighing from 10 to 15 pounds apiece, in a single day, and complained of being hungry that night.

NARCOTICS

The only narcotic used by the Siriono is tobacco (*éro*), which is smoked in clay pipes, whose manufacture has already been discussed. Both the men and the women smoke, although it is always the latter who make the pipes (*keákwa*) and prepare the tobacco. Children do not smoke until after they have reached the age of puberty.

Just when the Siriono adopted tobacco is not known, although it certainly does not seem to have been aboriginal with them. As already mentioned, one of my oldest informants said that it was received from the whites while he was still a child, which would date its adoption by this particular group of Siriono at some time within the last 60 or 70 years. (The literature tells us nothing on this point.) Other informants at Casarabe, however, told me that when there was no tobacco available other leaves were smoked, but what these were I was never able to determine. The forest Siriono with whom I lived at Tibaera saved seed and planted tobacco regularly with the rest of their crops, and they smoked no other kind of leaf. Wild tobacco, moreover, does not grow in the area.

After the leaves of tobacco have become mature they are picked by the women and are slowly dried on a small mat, made from the heart leaves of the motacú palm, which is placed on supports over the fire. Once dried the leaves are powdered in the hands and the tobacco is ready for smoking. The supply of powdered tobacco is stored in a small calabash, which is topped with a piece of corncob.

All smoking is done in the house. It is considered bad form to smoke while on the hunt, as it is believed that animals will be driven away by the smell. Most smoking thus takes place while the Siriono are resting in the hammock or having drinking feasts, and hunters almost always smoke immediately after returning from the forest to stave off hunger until they are given some food.

The pipe is filled and lighted by placing a small live coal on top of the tobacco. The pipe is grasped by the stem (the bowl gets very hot) with either the right or the left hand. When smoking, the head is slightly tilted back, since the pipe stem protrudes downward from the bowl. The smoke is sucked into the mouth only (no inhalation) and is blown out in short rapid puffs by

withdrawing the pipe and extending the lips. When there are several people around, the pipe is passed from one to another. When the pipe ceases to draw well, it is cleansed with a straw from a heart leaf of a motacú palm.

The Siriono do not seem to be much addicted to the use of tobacco. However, its role in the drinking feast is important in aiding the participants to arrive at a semidrugged or partially intoxicated condition. During the drinking feasts for women I often heard them singing impromptu songs about pipes and tobacco which indicates that this drug may have some further magical significance that I was unable to ascertain. Tobacco, however, is never used therapeutically.

DRINKING

Since the Siriono wear no clothes, and consequently perspire little, they are able to withstand long periods of time without water. Thirst, moreover, is almost never a problem to them, because wherever they wander they can find water holes or streams from which to drink, and if one cannot be found there are almost always lianas and stems of plants from which a considerable water supply can be obtained. Consequently the Indians rarely carry water with them when they are on the march.

At camp sites, water is brought to the house by women or children in calabashes or in sections of bamboo, which also serve as drinking vessels. If a thirsty Indian comes upon a water hole while in the forest, he plucks a leaf of patujú to drink from. In doing this once in the company of Kénda, one of my youthful informants from Casarabe, I inadvertently dropped my leaf into the water when I had finished drinking. He snatched it up and threw it away in the forest, saying that the leaf of the patujú contained an evil spirit and that if one threw his leaf into the water after drinking one would become sick. Although the ideas about water and thirst have not been crystallized to a point where I was able to get much information about them, I did observe that all Siriono followed this practice when drinking from holes in the forest.

Accompanying the frustrations of forest life are occasional drinking bouts, which vary in frequency with the quantity of wild bee honey available. Since this product is most abundant in the dry season—after the flowering of the plants and

trees—most of them thus occur during the months of August, September, October, and November.

Mead is made from a mixture of cooked corn meal (or cooked manioc or cooked camotes), water, and wild bee honey. It is always made by the women. The maize is first ground up fine in a mortar. The corn meal is then mixed with water and boiled in a clay pot until it becomes thick gruel. The hot gruel (not masticated as by many South American Indians) is then emptied into calabashes (containing only a small round hole at the top), each of which is about half-filled with cold water, until they are filled to about four-fifths of their capacity. After the gruel and the water have been thoroughly mixed with a small stick, about half a cup of wild honey for each quart of mixture is added to the calabashes. The honey is then stirred into the mixture, and the holes of the calabashes are loosely stopped with leaves of patujú to keep out flies and to allow some air for fermentation. The calabashes are then stored (undisturbed) in hanging baskets for about 3 days, when the brew is considered to be of sufficient force (about the strength of beer) to be drunk.

In making other types of beer the same process is followed, the only difference being that manioc (or camotes) is substituted for maize in making the gruel. To increase the strength of the beer, to make it more nourishing, and to hasten the fermentation process, boiled or baked corn-meal cakes are sometimes added to the brew.

Calabashes are considered to be the most suitable type of vessel for fermenting native beer, although when there was a shortage of these vessels I observed that it was fermented in long sections of bamboo.

The making of mead is accompanied by considerable excitement and bustle. Great care is taken to see that the mixture turns out all right. There are always plenty of children present hoping to get a bit of the honey, and the women usually do not lack helpers, since jealous neighbors, generally uncooperative, offer their services in the hope that they too will get a chance to partake of the honey while the mead is being made. More often than not they are brushed off and return to their hammocks unrewarded.

Drinking bouts usually start informally. The man possessing the liquor invites a number of his male relatives to join him in consuming what beer he may have on hand. Bouts generally start in

the afternoon, and, depending upon the quantity of liquor available, may last until far into the night or even be continued on the following day. The participants squat in a circle near the host's hammock, and as a calabash of mead is passed around, each in his turn drinks heavy draughts before passing it to the next person in the circle. The drinking is always accompanied by continual smoking of clay pipes (also passed around the circle), which ultimately contributes as much or more to the resulting intoxicated or drugged condition as does the somewhat light and nourishing native beer.

As a drinking feast progresses, the Siriono, who is a very uncommunicative fellow when sober, becomes an animated conversationalist, a performer, and a braggart. At the opening of the bout the talk usually turns to the merits of the liquor. One of my more poetic informants, Erésá-eánta (Strong-eyes), used to say, in describing the liquor at the start of almost every drinking feast: "Yesterday it was without force, like water or like earth, but today it has great strength." As the effects of the drinking and the smoking begin to be felt, one or more of the participants breaks out in song, usually impromptu and related to some exploit of which he is particularly proud, such as the killing of a tapir or a harpy eagle. Another may be engaged in discussing the desirability of looking for a new wife (always a young one or *yukwáki*) or of casting out the shrew he now has. As the mood gets mellow everyone joins the singing, and when the party has reached an advanced stage almost everyone is singing a different tune at the same time.

While attending these drinking feasts, I tried my best to record a number of these songs, but I was never able to set down more than snatches of them because of the bedlam and the darkness existing at the time. Moreover, since most of the participants, following a drinking bout, were victims of alcoholic amnesia, brutal hangovers, and high anxieties, it was impossible to get much cooperation from them in this matter later.

At every drinking feast of any size most of the nonparticipating members of the group are assembled at the edge of the circle. The spectators amuse themselves listening to the songs and the conversation, commenting on the course of the feast, and waiting for the participants to get drunk enough so that they can sneak a drink now and

then. Children are always present, eagerly awaiting the emptying of a calabash, since it is then passed to them to drain the dregs. The women are almost always in the background watching over their husbands, because they are quite certain from previous experience that the party will end in a brawl. This is always the case when there is sufficient liquor. A man deep in his cups will turn to another (it may be his brother, uncle, his son-in-law, or even his father-in-law) and insult him with some such phrase as "*Etómĩ túti nde*" ("You are very lazy") or "*Ai í tendé gátu*" ("You never bring me meat with any fat on it"). He will be answered in the same vein, and a fight will soon break out. The Siriono do not fight with their fists at this time; physical aggression is expressed in the form of a wrestling match, in which one participant tries to throw the other to the ground again and again until he is too exhausted to rise. Since the contestants are usually so drunk that they cannot stand up, these wrestling matches frequently terminate with both of them passed out on the floor much to the merriment of the spectators. Not infrequently, however, one or the other (or both) falls into one of the innumerable fires in every Siriono hut and gets badly burned.

When the party reaches the fighting stage the crying women intervene and try to stop the fights. At this time they too come in for their share of aggression and not infrequently are struck forcibly by their husbands. However, I heard of only one case in which a man murdered his wife in one of these drinking bouts. This happened approximately 15 years ago, the wife being shot through the heart with an arrow. Although overt aggression runs high during drinking feasts, after they are over the participants usually suppress their angry feelings within a few days' time, and all is normal again until another drinking bout takes place. Insofar as I observed little sexual activity takes place during or immediately after drinking feasts. Participants are usually too drunk to indulge in sex.

When a considerable supply of honey is available, drinking bouts are timed so as to take place every few days until all the liquor is gone. For lack of honey, however, not more than a dozen are likely to occur during the year. A man who has given a feast expects to be invited to and is expected (wants) to attend those given by the people who participated in his. As most of the

people who take part in these feasts are near relatives, this almost always happens.

In only one instance did I notice that the aggressions of the drinking feasts were the direct cause of strained relations for a long period of time. During a bout in August 1941, Eantándu (Father-of-Strong-one), a chief, insulted and wrestled when drunk with Erésá-eánta (Strong-eyes), his cousin, or father's sister's son, over questions of food. Eantándu when drunk told Erésá-eánta that he never brought him any food, that he never hunted spider monkeys, that he was lazy, that he was evil, etc. Although neither participant knew much about what he was doing, a wrestling match ensued in which Erésá-eánta got badly burned in the fire, and he was unable to get out of his hammock for several days. As a result of this fight, about which Erésá-eánta was later told by his wives and brothers, strained relations persisted until January 1942, when I first saw the two together again at a drinking feast given by Eantándu—one which, incidentally, did not end in a brawl, as the liquor ran out. After recovering from the first drinking feast, Erésá-eánta with a couple of his brothers and their families remained away from the band for long periods of time, hunting, fishing, collecting, and attending their gardens at a nearby lake. Although the party returned to Tibaera from time to time for a few days or a week, Erésá-eánta would have no relations whatever with Eantándu, even though their respective wives were friendly enough. After relations had been reestablished at the second drinking feast, however, the two continued on friendly terms.

Like the men, the women too have their drinking feasts, but these do not usually terminate as roughly as those of the men. In five of these feasts which I observed, singing was the prominent feature apart from the drinking and smoking. Although the women accused each other of having had sexual relations with one another's husbands, most of them had reached such an intoxicated condition by the time these accusations were made that they were placed in their hammocks to sleep it off.

In only one instance did I observe mixed drinking. This involved three old women and their husbands and brothers. On this occasion, however, only a few calabashes of mead were available, and the party was not organized in any way.

ROUTINE ACTIVITIES OF LIFE

DAILY ROUND

"Early to bed and early to rise" is the motto of the Siriono, who usually retire to their hammocks as soon as night falls and who are up and about before the crack of dawn. Actually their day begins a couple of hours before dawn. Retiring as they do about 7 or 8 o'clock in the evening, they are generally awake by 3 a. m., when they begin to sing impromptu songs as they engage in the routine of roasting a cob of maize, a piece of manioc, or some camotes, or of warming up a pot of food left over from the night before. Such activity is continued until daylight, by which time they have eaten and the day's work has begun.

In the early morning a Siriono hut must be approached with caution so as to avoid stepping on the innumerable piles of excreta that have been freshly deposited just outside of the house during the night. Although adults retire to a respectable distance from the house to defecate during the day—there are no special latrines—their nightly behavior in this respect is restricted by the intense darkness, the annoyance of insect pests, and the fear of evil spirits, and they seldom go very far from the house. Moreover, the excreta are rarely removed the following day, but are left to gather flies, to dry up, or to be washed away by the rain. Thus after a few weeks' time the immediate environs of the house become rather unbearable to the unaccustomed. The only care taken in this respect is to avoid defecating directly in the house, on the trails leading out from the house, or within about 10 yards of a water hole.

The activities of the day begin with little ceremony. Such health and cleanliness measures as washing the teeth, face, or hands, or combing the hair, at such an early hour of the morning, are quite unknown to the Siriono. True, one may go to the hole or a brook for water early in the morning, but it will be used for drinking or cooking. Moreover, at this time of day almost no attention is paid to one's neighbor. This is clearly reflected in the native language, which contains no such salutations as "Good morning" or "Good night," and it is rare to ask a neighbor how he slept the night before or to inquire of a sick relative whether he has improved during the night. Most early morning preoccupations, in fact, revolve around the happenings in one's immediate family, within

which, however, neither loud conversation nor squalling children ever seem to be lacking. Especially are complaints registered: one may have been bothered by mosquitoes the night before; another may have been bitten by a vampire bat; a third may have burned himself, having fallen out of his hammock into the fire during a nightmare.

On a typical day, when settled or on the march, the men are off to hunt at the break of day. If they have not had time to eat before they leave, they may take with them a piece of roast meat, maize, or manioc, to munch as they go along the trail. When men remain at home, they usually occupy themselves in repairing arrows, making bows and digging sticks, etc. If the band is fairly settled at the time, the men hunt in all directions from the house, but if the group is on the march, the hunters usually proceed in a circuitous route through the forest in the direction of the camping spot decided upon for that night. In any case the women are usually left behind to care for the children and to carry out the routine household duties or, if on the march, to pack up the gear and transport it to the next camping spot. As camps are rarely moved during the rainy season, and not more often than every 10 days or so during the dry season, a partial stability is maintained over considerable periods of time.

While the men are out hunting, the women may be occupied in any number of routine household tasks, such as bringing in firewood, grinding corn, cooking, weaving baskets or mats, coiling pots, drying tobacco, or repairing hammocks. The women also devote a considerable part of the average day to the spinning of cotton string, which is extensively used in arrow making. Since most of these household duties are pursued around the hammock and the fire, gossip and conversation are freely indulged in throughout the day, and there is almost always a pot of something cooking on the fire with which the women and children nourish themselves while the men are gone.

The men usually return from the hunt between 4 and 6 o'clock in the afternoon. Some type of food has already been prepared, awaiting their arrival, and while the men are eating, the women occupy themselves in dressing the day's kill for the evening meal, which will be eaten as soon as it

can be cooked. If darkness has not descended, a bath and sexual intercourse frequently follow the dinner, after which the Indians retire to their hammocks to smoke, play with the children, and talk until sleep overtakes them. Fatigued by a day of work or of walking in the forest, most members of the camp are asleep by 8 o'clock, unless there is to be a dance or a drinking feast.

WORK AND DIVISION OF LABOR

Labor is not a virtue among the Siriono. They are relatively apathetic to work (*tába tába*), which includes such distasteful tasks as house building, gathering firewood, clearing, planting, and tilling of fields. In quite a different class, however, are such pleasant occupations as hunting (*gwáta gwáta*) and collecting (*déka déka*, "to look for"), which are regarded more as diversions than as work. This is not to be wondered at, since these latter pursuits are more directly and immediately connected with the urge for food than are the more distantly rewarding labors of agriculture. What seems to be true, to put it psychologically, is that the responses of hunting, fishing, and collecting have been and are more immediately reinforced than those of agriculture.

When food, especially meat, is plentiful, little work is performed. What people like best to do at this time is to lie in their hammocks, rest, eat, indulge in sexual intercourse, sleep, play with their children, be groomed, sing, dance, or drink. Free time is rarely employed in improving the house, although rain is expected, or in enlarging a garden plot, although the supply of food is insecure. When the immediate needs for food have been supplied, a person is neither much criticized for doing nothing, nor much praised for occupying his time in constructive labor.

Besides the immediate desire and necessity for food, the incentives to labor are few. No prestige is gained by building a better house or a larger garden, both of which may have to be abandoned on the next move. It would seem, in fact, that the nomadic character of the band is the principal reason for not working, because the results of one's labor can rarely be carried with one.

The nuclear family is the basic work group. Although considerable cooperation in the performance of duties takes place between members of an extended family, there are few tasks whose

performance necessitates the cooperation of all members of the band. The nearest approach to such cooperation occurs when the band is on the march—when a new camp site has to be cleared or when a new house has to be built. But even in carrying out these tasks, members of an extended family join together to clear the part of the site which they will occupy or to build that section of the house where they will live. In this simple society the ties of kinship are strong.

Within the family, the division of labor follows normal lines of age and sex, except that the duties performed are neither as highly differentiated nor as sharply defined as in many preliterate societies. The peculiar circumstances prevailing in this environment and culture sometimes demand that a person perform temporarily, at least, tasks that might otherwise be delegated to the opposite sex. Thus, although cooking is normally the role of a

TABLE 2.—Distribution of labor according to sex

Activities	Men and women	Women	Men
Collecting.....	×		
Clearing.....	×		
Planting.....	×		
Tilling.....	×		
Harvesting.....	×		
Dressing game.....	×		
Burden carrying.....	×		
Cooking.....		×	
Caring for children.....		×	
Spinning thread.....		×	
Twining string.....		×	
Twining bowstring.....		×	
Twining hammocks.....		×	
Twining baby slings.....		×	
Carrying water.....		×	
Collecting firewood.....		×	
Extracting clay.....		×	
Pot making.....		×	
Pipe making.....		×	
Weaving mats.....		×	
Weaving fire fans.....		×	
Weaving baskets.....		×	
Making mead.....		×	
Preparing feather ornaments.....		×	
Stringing necklaces.....		×	
Cutting and depilating hair.....		×	
Hunting.....			×
Fishing.....			×
Felling trees.....			×
Extracting honey.....			×
Weapon making.....			×
Tool making (spindle, digging stick, etc.).....			×
House building.....			×
Bridge making.....			×
Refining beeswax.....			×
Preparing utensils (calabashes, mortar and pestle, etc.).....			×

woman, when the men are off on the hunt it is they who must barbecue the meat. Similarly, although basketry is the art of women, men must sometimes make baskets in which to carry home game.

On the whole, however, the sex division of labor follows the pattern presented in table 2.

TRAVEL AND TRANSPORTATION

Although rivers and lakes abound in the territory traversed by the Siriono, all movement and transportation take place on foot, overland. Considering that the water courses are extremely abundant, that the Siriono are constantly crossing rivers and streams in their wanderings, and that there is no lack of excellent materials in the environment from which to build canoes, it is surprising that they have remained unique, as compared with their immediate neighbors, in not constructing watercraft of some kind. Even though they are not a river people—their camps are usually located inland—the number of lakes and streams in their territory would seem to justify the use of watercraft, not only as an adjunct to foot travel, but as a means of augmenting the food supply as well. Since much of the activity related to the food quest, during the dry season particularly, centers around the lagoons and streams, canoes would be of great advantage in fishing and in stalking waterfowl. It would seem, in fact, that the lack of canoes can only be explained by such hypotheses as that they have never tried to build them or that attempts to build them have proved unrewarding.

The trails (*ñénda*) over which transportation and hunting take place are not built; they simply grow up from use. A hunter may strike out in a general direction through the forest in quest of game, and as he follows his meandering course, avoiding dense growths of underbrush where travel is difficult and going around fallen trees that may impede his progress, he bends over a few leaves and twigs. In his travels he may encounter a water hole, a stream, or a lake where hunting is good, and if this be the case, he may return again and again to the same spot, sometimes with his tribesmen, until by frequent use a new trail is formed. When a new camp site has been settled, trails grow up rapidly as a result of hunters and collectors making food recon-

naissances in all directions from the house. Those routes yielding game are traversed again and again, while those proving sterile are immediately abandoned.

Trails are never cleared and are very poorly marked. About every 15 feet or so a small plant or a piece of brush is bent over to the right of the direction in which one is proceeding. Thus one can always tell in which direction the trail runs or was made. Except in the cases of trails which connect one camp site with another, the network of trails roughly follows the pattern of a wheel. With the camp site as the hub, a trail goes out along one spoke and returns by another. A great deal of crisscrossing and overlapping, of course, do occur.

It is impossible for the uninitiated to follow these rude paths. Since most Indian hunting trails lead out from a hut and back to it, one must make many sterile attempts in trying to trace the course of a band from one abandoned hut to another, before striking the path that connects two houses. Even when I was traveling with Indians of the same tribal group, I found that they, too, were never sure whether a newly discovered trail was an abandoned hunting trail of another band or whether it might actually lead us on to the spot where the band was settled.

When on the march the Indians do not move great distances in a single day. The lack of good roads, the necessity of crossing swamps and streams, the impediment of young children who must be carried or who cannot walk rapidly, the burden of the gear—the hammocks, the pots, the baskets, the calabashes, the food, etc.—all hinder progress considerably. When lack of food or water forces a band to move, the members usually average not more than 8 or 10 miles a day, and since they stop to rest, hunt, and gather at each camping place, movement of the entire band does not usually take place more often than every 4 or 5 days. Unless there is some definite objective toward which they are traveling, they exhaust the wild life of an area as they travel.

While I was living with a band on the march for about 6 weeks during September and October 1941, while they were traveling from a camp site northeast of Yaguarú, Guarayos, to Tibaera on the Rio Blanco, it took them about a month to travel about a hundred miles. Movement of the entire band took place on the average of every 3

days. There were nine camps between the starting point and the objective, which means that on days when movement took place approximately 10 miles were covered. It is difficult, however, to make any generalizations as to the amount of travel done by a band, since so much depends on the food supply in the area. Some camps may be abandoned within a few days' time, while others may be occupied for more than 6 months. I visited some 50 sites that had been variously occupied and abandoned during the past 20 years.

The amount of band travel, however, cannot be taken as a measure of the amount of travel done by individual hunters or by family groups. Hunters may cover as many as 40 miles a day in their quest for game, and when nuclear families are away from the band on hunting and gathering expeditions, they, too, may travel great distances in a single day. I have made trips with a man, his wife, and young child when we walked as many as 25 miles in a single day.

When on the move, men cooperate with the women in carrying the family burdens, which are packed in carrying baskets woven from the green leaves of the motacú palm. These baskets are carried on the back, being suspended from the head (women) or shoulders (men) by a tumpline of liana.

Considerable weight may be transported by these methods. The average pack for a man or woman runs around 60 or 70 pounds. When meat is being transported in from the forest, I have seen a man carry up to 200 pounds on his back for a distance of 10 miles without exhibiting a great deal of fatigue. When the Siriono are traveling or carrying burdens, however, brief halts are usually made about every 2 hours for purposes of resting.

Young children are carried by the mother in a sling which is slung around her shoulder. The baby sits in the sling with its legs astride her hip. When marching in the forest a man may sometimes relieve a woman in carrying the children, but he will never enter camp carrying "female possessions."

On the march the men, with their bows and arrows over their shoulders, go ahead of the women. If game is sighted they temporarily drop their loads and give chase. By the time the next camping place is reached, they have generally killed some animals for the evening meal.

In walking over the narrow paths, the Indians march in single file and walk with the toes pointed inward at an angle of about 45° to prevent sticks and thorns from bruising the tender skin between their toes. Because of this habit, the Siriono have become a really pigeon-toed people.

Although no type of watercraft is manufactured or used, rivers, swamps, and streams offer little hindrance to travel except during the rainy season, when most of the country becomes one continuous body of water. But as already noted, little movement takes place at this time. Even in the dry season, however, there are brooks, streams, and swamps to cross in every day's travel. Since the bodies of waters are low at this season most of them can just be walked through, but if the water is found deeper than the height of one's head other means of crossing must be resorted to.

The most common method of crossing a deep stream is to fell a tree from one bank to the other. If the stream is fairly wide, a tree may be felled from either bank. If this does not prove feasible, a heavy liana may be tied to trees on both banks—one individual swims across with the liana—and the people pass from one side to the other by going hand over hand along the liana, the body being buoyed up by the water. It is interesting to note that D'Orbigny (1835-47, vol. 4, pp. 343-344) first called our attention to this method of crossing the rivers more than a hundred years ago. When crossing streams or rivers, burdens are generally placed on the head to keep them dry, and the children are carried astraddle on the shoulders.

A great many streams become stagnant during the dry season, and are covered with a dense blanket of water grass. These growths are usually so thick that one can walk quickly over their tops without sinking into the water below. But for aid in crossing such streams saplings or bamboos are sometimes laid on top of the grass so as to make a temporary bridge.

When all other methods prove to be of no avail in crossing a river or a stream, swimming is resorted to. The Siriono are excellent swimmers. They swim with a crawl stroke, as well as "dog fashion." In spite of the abundance of palometas and alligators, every child of 8 knows how to swim.

Finally, it should be mentioned that in crossing deep rivers or streams, people usually cover their genitals with one hand so as to protect them from the palometas which infest all of these waters.

They also step with care so as to avoid sting rays, whose stabs leave nasty wounds.

ART, MUSIC, AND DANCING

Art, apart from the song and dance, has remained at a very backward level among the Siriono. Beyond the stringing of necklaces, the painting of the body (without design), and the decoration of hair with feathers, no attempt is made to embellish anything. Most objects of the culture, in fact, seem to have a purely utilitarian reason for existence. Pottery is not only rude but plain. Such things as bows and arrows and calabashes are never decorated. Moreover, the idea of portraying some aspect of the culture, realistically or symbolically, by drawing, painting, or sculpture is completely foreign to these Indians.

What has been said of art can also be said of the instrumental aspect of music. Not a single type of musical instrument is known. Not even such rhythm-beating instruments as rattles or clappers are employed, nor is anything ever hung on the body to make noise to accompany singing or dancing. All music, in fact, is vocal. Singing does, however, play an important role in the culture.

Early morning singing, which makes it impossible for anyone to sleep after it starts, is a definite part of each day's routine, especially when the group is settled for any length of time as they were at Tibaera. Even on the march, or when a man is out alone with his family, this practice is followed. Everyone sings. The songs are monotonous, impromptu chants, which sometimes have reference to some aspect of the food quest. From some distance away, the early morning chorus sounds not unlike a group of howler monkeys heralding the day from the top of some distant tree.

When I was first with the Indians I forced myself to leave a comfortable hammock and mosquito net many times at about 3 a. m., and, with flashlight, pencil, and notebook in hand, I made a sincere effort to record some of this early morning music. After a series of unrewarding attempts, however, and under extremely unpleasant conditions, I allowed the Indians to greet the day without the nuisance of my presence. My informants all told me, however, that the songs had no meaning, and, as far as the words were concerned, I

am inclined to believe that this is true. In discussing the question with Abraham Richards, the son of an American cattle rancher who was born and raised with a group of Siriono on his father's cattle ranch near El Carmen, he told me that he, also, was never able to make any sense out of these early morning songs. However that may be, on inquiring of informants as to why they always greeted the day with songs, one of two reasons was always given: either they were happy or they were like the birds ("Hadn't I noticed that most of the birds and some of the animals greeted the day with song?"). Singing in the morning thus may perform the function not only of pleasantly filling in the period between darkness and dawn, after sufficient sleep has been obtained and before the activities of the day begin, but also of reinforcing the bonds maintained with the animal world.

The importance of singing at drinking feasts has already been stressed. The songs sung at this time, like those sung in the early morning, are largely impromptu. To record them without instruments is next to an impossibility, because the singers are drunk and mumble their words more than usual. Insofar as I was able to determine, however, they are stylized only as to form and rhythm and never as to content. Informants said that when drunk they sang whatever rhythmic combinations came into their heads.

The most meaningful songs seem to be those that are sung in connection with the dance. Dancing (*yurúki*) is always accompanied by singing (*hidási dási*) and is a very common way of passing parts of the long tropical nights especially when the moon is shining. Group dancing is rarely indulged in during the day or on nights when the moon is dark. On such nights a fear of evil spirits keeps the Indian close to his hammock.

Both men and women dance to the accompaniment of songs, but they never dance together. Nor do people dance alone. A man (or woman) wishing to dance may get up and do a solo number by way of animating his tribesmen to join him, but the expression of the dance comes through participation of several people in the circle.

In forming the dance circle, men link their arms in the following manner. With his right hand one grasps the left wrist of the second person on one's right. One's left wrist is then grasped by the right

hand of the second person on one's left. When the circle is completed one's back is thus encircled by the left arm of the person on one's right and by the right arm of the person on one's left.

Following the formation of the circle the dancing and singing begin. The participants throw back their heads and stamp their feet alternately up and down firmly to the rhythm of the music. The circle itself remains stationary during the first phase of the dance. When the dance begins, the beats of the feet are coordinated with the accented syllables of the following song, which is sung in unison:

hito hito hito hito
tí su á ča
yí sa dí mosé
á tí ba tí i čá
ai i ča
mimbá mimbá

This song is always sung at the opening of a dance, whether it be men or women that are dancing, but I was unable to get a translation of it. All of my informants told me that the song was meaningless, but it does contain some meaningful words, such as *yisádi mosé* ("when dancing") and the expression *hito* which probably here means "happy." This suggests that part of the song, at least, means something like "I am happy when I dance."

During the first phase of the dance, the song quoted above is sung over and over again in unison about 25 times, by which time a considerable emotional enthusiasm has taken hold of the group. After a brief rest, the second phase of the dance begins, also by everyone singing a song in unison. Some verses of this song are quoted below:

áh áh áh áh áh
sán de ra čá
tá du bá
múndu
čú du já há

nde ra já nendá
ta mĩNge
múndu
čú du já há

ai sai ibí ató
ai sai ibí ató
ibi kwa
kú ru kwá ta
kí a tá
ai sai ibí a jú du
mún du bá
a tíru bá

múndu
čú du já há

Although the above song contains certain meaningful words, a translation is impossible because it seems to follow no grammatical pattern. After a number of verses have been sung over and over again to the accompaniment of stamping feet, a leader takes charge of a circle and the singing becomes impromptu. During this phase of the dance, in addition to the stamping of feet, the entire circle of dancers moves round and round counterclockwise, the participants bending their heads downward so as to hear the words of the leader. As he chants a phrase the participants repeat it after him. His phrases often bear on some exploit in hunting or on some event in his life of which he is particularly proud. One moonlight night, for example, Yikinándu (Father of Owl-monkey) chanted for 2 hours about how he had killed tapirs and jaguars; on another, Erésacánta (Strong-eyes) sang for as long a time about how he and his brother killed a white man years ago during the last rubber boom. Since these songs are impromptu and are sung only during a dance, it is impossible to record more than snatches of them without technical equipment, which I did not possess. Nor did my knowledge of the language ever reach a point where I could understand them fully.

The women perform a ring dance similar to that of the men, except that they do not link their arms in the same fashion and do not stamp the ground with such force with their feet. In forming the dance circle women place their arms around the necks of the participants next to them, and their body movements consist of waddling around in a circle counterclockwise, with hips swaying, to the accompaniment of the songs. The women's dance begins with the same song as that of the men. It is sung over and over in unison, after which a leader breaks in with an impromptu chant, the phrases of which are repeated after her by the other dancers. On the whole, the women dance less often than the men.

Everyone knows how to dance and to sing some songs. Since the rhythm of the dance consists merely in the stamping of feet, there is no problem in learning to dance. Young people are often observed forming a dance circle in imitation of their parents. Although all adults know how to sing some songs, certain individuals are known

to be more skillful in composing songs than others. Such people usually take the lead in the dances and play the most prominent role in the singing that accompanies drinking feasts. It may be significant that in the two extended families which I knew well, both of the chiefs were prominent

FOLK BELIEFS AND SCIENCE

The Siriono conception of the universe is an almost completely uncrystallized one. My Indian friends never voluntarily talked about cosmological matters, and when I attempted by questions to gain some insight into their ideas about the nature of the universe I almost always met with failure. Young men would say, "Ask the old men," and the old men would answer, "I do not know." Even the sage of one of the extended families, Embúta (Beard), although he showed considerable interest in my inquiries and gave me unhesitatingly what information he possessed, was simply unable, for lack of ideas, to enlighten me on most points. On several occasions I even held consultations with those whom I regarded as the sages of the band, but got only general agreement that nothing was known about this question or that. It would seem that their concern with the immediate world has left the Siriono little time to speculate on cosmological matters.

The more or less indifferent attitude taken toward the universe is clearly reflected in the virtual lack of folklore and mythology. The Siriono are one of the few primitive peoples I know of who do not devote a considerable part of their free time to the telling of folk tales and myths. In about 8 months of more or less permanent (i. e., day and night) residence with them, only twice was anyone animated to tell a folk tale or story of his own accord. After making one unsuccessful attempt after another to get informants to relate myths and tales, I was forced finally to conclude that this phase of culture was simply not developed, that there was no fund of folklore and mythology upon which to draw. If people did any talking at night it usually had reference to some happening in the immediate world, such as a tapir hunt or a quest for wild fruits.

Moon (Yási) is the culture hero of the Siriono. Formerly he was a great chief who lived on the earth. At that time there was nothing but water

singers. But although they often took the role as leaders, other individuals equally gifted also frequently assumed the same role. There are no professionals—no persons who are always called upon to sing at a drinking feast or to chant at a curing rite.

and a race of harmful people. Moon destroyed these evil beings, and at the places where they were killed, the reeds from which the Siriono make their arrows sprang up. Moon then created man and the animals. At first both were in a kind of amorphic state. The animals were too hot to touch and burned the arms of the men who came in contact with them. Jaguars, especially, killed many men before the latter learned how to hunt them. Moon taught men how to hunt and fish, to make bows and arrows, to plant crops. He gave them maize, papaya, manioc, chonta, and wild fruits and plants. In fact, he is responsible for the world and everything in it.

Moon is now believed to live in the sky. The reason for his ascending to the heavens is revealed in the following folk tale, which also explains why the animals have the shapes and colors they now possess.

Yási (Moon) had a child. Yákwa (Jaguar) was delousing the child and killed him by biting him in the head. Then Yási came along and said, "Who killed my child?" Yoíta (Fox) was standing by and said, "I do not know." Yákwa was hidden between two mats of motacú at this time. Then Yási went along and began to ask all of the other animals, "Who killed my child?" All of them answered, "We do not know." Then he came to where Erúbat (Spider Monkey) and Téndi (Howler Monkey), and Seáči (Coati) were having *héri héri* (a drinking feast). Yási was very angry. Erúbat wanted to be red in color like Téndi, but Yási said, "You will be black." Yási was angry because all of the animals were drunk. Then he grabbed Téndi by the neck and pulled it into the shape it now has. Kwándu (Porcupine) was standing by, got angry with Yási and began to scratch him. Yási put spines in his back and fixed his feet so that he could not scratch. He also twisted the feet of Antanbúja and Antandíša (Anteaters) and picked up Konómbi (Tortoise) and threw him down again, saying, "You will not walk fast." All of the animals were very angry. That is why Erúbat and Téndi howl so loudly today and that is why Erúbat throws chonta fruits at one when one passes by. Yási was still very angry and decided to go up into the sky. He began to climb a huge tree up into the sky. Before going up he told Yákwa to follow him, but Yákwa did not know how to climb very well and when he got

part way up he fell down into the water below and was eaten up by Sénye (Palometas), who were enormous in those days.

The folk tale quoted above, of which there are a number of variants, was about the only one I ever heard the Siriono tell. Although Moon is credited with having started everything in their culture, stories to account for these things were never told. I could get no supporting myths, for instance, for the origin of the world, the origin of men, or the origin of fire, even though informants were agreed that Moon was responsible for them.

Moon now lives in the sky. He is a great chief. He spends about half of his time hunting. During the dark of the moon the Siriono say that he is far away, hunting peccary. To explain the waxing moon, Embúta told me that when Yási comes back from these hunts his face is very dirty; he washes a little of it each day until, when the moon is full, his face is clean. To explain the waning moon, he said that when Yási goes on a hunt he gets his face a little dirtier each day, until before long it is so dirty that it cannot be seen at all.

In the explanation of natural phenomena, Moon also plays an important causal role. One explanation of thunder (*ingičinámo*) and lightning (*iNgúì*) is that they are caused by Moon throwing peccaries and jaguars down from the sky. An alternative explanation of thunder was offered by Ačíba-eóko (Long-arm), who stated that it was caused by Moon pulling up bamboo in the sky. Still a third interpretation of thunder and lightning, one that has no relation to Moon, is that they are caused by a huge jaguar (*yakwadúsu*) who lives in the sky. When this jaguar winks his eyes there is lightning, and when he shakes himself there is thunder. There was no general agreement among informants as to which of these interpretations is correct.

Thunder and lightning, however, are always greeted with howls by the men, who step outside of the house and roar at the sky. This is believed to drive the thunder and lightning away. Informants also told me that it was good to dance and sing during a thunder storm, as it would then disappear more quickly, but I never saw them practice what they preached in this respect.

As to other celestial phenomena, no distinction is made between the planets and the stars, and there is no grouping of stars into constellations.

Both planets and stars are called *yási táta* (moon fire). Insofar as I could tell, these "moon fires" are believed to be caused by the moon, although in places where Christian influence has penetrated they are thought to be fires of people who live in the heavens. I was unable to get any causal explanation for the rainbow (*íbe íri*), although its appearance presages an epidemic of colds. One of my Casarabe informants, Kénda, told me that the rainbow contained an *abačikwaia* ("evil spirit") which causes sickness of the nose and throat. Eclipses, it seems, are unknown; at least I was unable to get any interpretation of them. Beyond the statement that the sun is "fire" and is responsible for the light of day, I could get no native explanation of it.

Mist (or fog) is called *tatáši* (smoke), and is equated with smoke from fires or pipes. Rain is caused by the overflowing of a large lake which is believed to exist in the heavens. Winds (*kiridia*), especially the cold south winds that come from Tierra del Fuego during the dry season, are believed to be caused by *abačikwaia*. No special significance seems to attach to whirlwinds, of which I was unable to get an explanation, although storms generally are also thought to be caused by *abačikwaia*.

Most adults have an excellent knowledge of the geography of the area in which they wander. No matter how meandering his course, the Indian never gets lost in the jungle and is able to return directly to the spot from which he started. While no more than two cardinal points—east, where the sun rises, and west, where the sun sets—are recognized, the course of the sun in the sky, together with such marks as topographical phenomena and water courses, accurately guide the Indian on his way.

Knowledge of plants and animals is most extensive. When the plants flower, when they bear their fruit, which ones are good to eat, etc. are known by every child of 10. The habits of animals—what they eat, where they sleep, when they have their young, etc.—are common knowledge to every boy of 12.

NUMERATION, MENSURATION, AND TIME RECKONING

The Siriono are unable to count beyond 3. In counting to 3, however, the following words are employed: *komí* (1), *yerémo* (2), *yeremóño* (3).

Everything above 3 becomes either *etubenta* (much) or *eáta* (many).

In counting, the fingers are sometimes employed to illustrate the desired number by placing one, two, or three of them on the nose. In indicating any number above 3, in addition to saying "many," the fingers on one or both hands may be held up, or, if the number is very great, the toes may be thrown in to boot. For instance, when a returning hunter is asked some such question as "How many turtles did you find?", if the answer is below four he will hold up the appropriate number of fingers to his nose and say the number; if it is above three he may hold up a confused number of fingers and just say "many"; if it is very great he may demonstrate his toes as well.

The inability to count beyond 3, however, does not mean that an absence of one object from among a large number will not be noted. A man who has a hundred ears of corn hanging on a pole, for instance, will note the lack of one ear immediately. Thus the mathematics of the group, when it comes to counting above 3, at least, seems to be based on some kind of Gestalt; whether something has been added to or subtracted from the visible total will be known because of a change in configuration.

Since trade and commerce are completely foreign to the Siriono, they employ no weights or measures. The size of pots, the length of bows and arrows, etc., are determined entirely by guess. The length of a hammock, of course, is roughly determined by the height of the person who will use it, but no tools of any kind are employed in measurement. The same may be said for measurements of distance, which is merely expressed in terms of far (*išo*) and near (*aiiti*) with the addition of gestures. With respect to distance, the Indians sometimes employ such vague references as one, two, three, or many "sleeps," i. e., days away on foot.

No records of time are kept, and no type of calendar exists. The year, with its division into

months or "moons," is quite unknown. Events are sometimes referred to phases of the moon, but such references are extremely vague. The seasons, of course, are clearly recognized from such phenomena as the receding of waters, the flowering of plants, the ripening of wild fruits, and the harvest of reeds, but seasons are not named and are not coordinated by the Siriono into any kind of calendar year, although such a calendar might easily be compiled. In referring to past events, the Siriono most frequently say that they happened *kóse mosé*, which may mean any time before the day before yesterday. Events are also sometimes referred to as having taken place "when I was a little girl" (*yukwáki mosé*), "when I was sick" (*šerási mosé*), "when I killed a tapir" (*šedkwantui máno mosé*), "when I was living at the old house" (*še čučúa ima mosé*), etc.

Day is referred to as *ńási* and night as *itondáru*. Tomorrow is known as *isamámi* and yesterday as *kúdi*. To express the day after tomorrow or any day in the future the Siriono say *isamámi anóNge* ("brother of tomorrow"), and they similarly call the day before yesterday *kúdi anóNge* ("brother of yesterday"). Today is always expressed by *námo* ("now"). The time of day is indicated by the position of the sun in the sky. When one asks a Siriono "Where is the sun?" ("*ma tendá ši mánde?*"), one may get any of the following answers, depending on the time of day or night:

erésai i tendá bi ("the sun can be seen")—about 6 a. m.

ténda čui ("the sun is out")—about 8 a. m.

ténda čui teńu kóti ("the sun is well up")—about 10 a. m.

ténda nánde ileré ("the sun is overhead")—noon.

ténda óso ("the sun is leaving")—about 4 p. m.

ténda osóti ("the sun is low")—about 5 p. m.

ténda óso teńu kóti ("the sun is well down")—about 6 p. m.

ibi ta ténda kóti ("the sun is under the earth")—about 7 p. m.

edesai ito ("hard to see")—twilight.

ito námo ("soon dark")—about 7 p. m.

itondáru ("darkness")—about 8 p. m.

itondáru túti ("very dark")—about 10 p. m.

itondi ("pitch dark")—about midnight.

SOCIAL AND POLITICAL ORGANIZATION

THE FAMILY

The nuclear family, consisting of a married man, his spouse or spouses, and their children, is the fundamental social and economic unit among the Siriono. Most of the activities of the culture, in fact, revolve around the nuclear family. Hunting is largely a family affair, as are fishing, collecting, and agriculture. Siriono society, moreover, contains no specialists; the only occupational differences are those based on sex and age. Hence all work such as basket making, tool making, weapon making, and pot making must be done within the family. So important is the nuclear family that the culture contains few activities and the society performs few functions that are not embodied in or performed by individual family groups.

Family life centers not in a separate dwelling but around the hammocks of the husband and wife, which are hung in the communal dwelling of the band. Each monogamous family generally occupies two hammocks; one is for the man and the other for his wife and children. In polygynous families the wives occupy separate hammocks, which are placed with reference to the hammock of the husband according to their status in the family hierarchy. The first wife usually occupies the position to the right of the husband; the second, to the left; the third, at his head; the fourth, at his feet. Between these hammocks lie the family hearths or fires upon which the cooking is done. Since the distance between the hammocks is seldom greater than 3 feet, a nuclear family, if monogamous, rarely occupies a space greater than 8 feet square. Within this hang the calabashes of water, the baskets of food, and all other family possessions.

While one usually enters a family group by birth or by marriage, it is also possible to enter by adoption. Among the Siriono, however, there are no formal ceremonies of adoption, nor are any specific relatives designated to take care of orphan children. One orphan whom I knew was being raised by his maternal grandmother; a second, by her mother's sister; still a third, by his mother's parallel cousin (a classificatory sister), who also happened to be his father's second wife. Informants told me, however, that a mother's sister of an orphan child was most frequently designated

to assume the mother's role. Insofar as I was able to determine, adopted children are treated in about the same way and are considered as much a part of the family as natural children.

Adults are never adopted. After living about 8 months with the Siriono, during which time I was on *šenóNge* (my brother) terms with the chief and often hung my hammock next to his, I was never regarded as a member of the family except in a joking way. While I was respected and generally liked, I was always looked upon as an outsider.

Within the nuclear family authority is patristic. A woman is subservient to her husband, while children are subservient to both parents. In polygynous families the first wife—generally the one to whom the man has been married the longest—is dominant over all other wives. While considerable economic cooperation takes place between cowives in a polygynous family, more work is done by the secondary wives than by the first wife. The former, for instance, are always required to do the menial tasks, such as bringing in firewood and water. The first wife, moreover, is privileged to distribute her husband's game, she usually gets the first choice (after the husband) of food, and it is usually her son who succeeds his deceased father if the latter was a chief. Furthermore, it is at the hearth of the first wife that the husband generally eats. The secondary wives maintain hearths of their own where they cook for themselves and their children.

A man enjoys sex rights with all of his wives, but they are not necessarily exercised in any prescribed manner such as by rotating from one wife to another or by concentrating principally on the first wife. In sororal unions the kinship tie between cowives doubtless does much to mitigate friction that might otherwise arise between them, but in nonsororal plural marriages sexual jealousy between cowives is sometimes intense. Since food and sex go hand in hand in Siriono society—and there is a scarcity of the former—the wives with whom the husband most frequently has sex relations are also the ones who generally get the most to eat. Consequently, cowives frequently vie with one another for the sexual favors of their husband. This sometimes leads to bitter fights and quarrels. If, for instance, a first wife is

growing old and is receiving less and less attention from her husband as regards both food and sex, she frequently displaces the aggression she feels for him, but cannot express directly, to a younger wife who is enjoying his favors at the moment. Such outbursts of emotion sometimes culminate in bitter fights, the women tearing up each other's hammocks and striking each other with digging sticks and spindles. An aging first wife generally maintains her dominance in the family for a while, but as her husband pays less and less attention to her, she gradually resigns herself to a secondary role in the household. She continues to cling to her economic rights, however, as long as she possibly can, and these are usually maintained longer than her sexual dominance.

A man generally takes no part in the fights that break out between his wives; indeed he is usually away on the hunt when they occur. Only if they occur too frequently or become too violent does the husband interfere. Under these conditions he may threaten with divorce the wife standing lower in his favor, in order to keep peace in the family.

While relations between husband and wife are generally amicable, quarrels are of frequent occurrence. They usually arise over questions of food and sex. When a man has been out hunting all day without eating and arrives home to find that his wife has not prepared something for him to eat, or if he has had ill luck in hunting and is chided for this by his wife, a quarrel is apt to arise. In situations of this kind it is the husband who expresses the stronger aggression, and as a rule other members of a family take no part in a marital dispute.

If a man is only mildly angry with his wife, his feelings usually go no further than harsh words. He may accuse her of being *etómi* (lazy) or *ečimbási* (promiscuous), or threaten her with divorce. If his anger rises to a higher pitch, he may rip a string or two from her hammock or smash one of her pots. If his anger becomes intense, he may tear her hammock to shreds, chase her out of the house with a firebrand, or even turn his anger against himself and break his bow and arrows. He never beats her, however. Following an intense outburst of aggression, to which a woman responds by crying and running into the bush, a man usually leaves the portion of the dwelling which he occupies with his wife and goes back to

his relatives until amicable relations have again been established. A man signifies his desire for reconciliation by returning to the hearth of his wife.

THE EXTENDED FAMILY

Besides being a member of a nuclear family, every Siriono also belongs to a larger kin group, the matrilineal extended family. Such unilineal kin groupings as moieties, clans, and sibs are not found among the Siriono. Because of matrilineal residence, groups of matrilineal relatives tend to cluster together in the house and to form extended families. An extended family is made up of all females in a direct line of descent, plus their spouses and their unmarried children.

The primary function of the extended family is economic. While the nuclear family is the basic economic unit, considerable cooperation in the performance of duties also takes place within the extended family. Such cooperation is often heightened by the fact that brothers frequently marry sisters and thus continue the cooperative role they played in their family of orientation.

The distribution of food rarely extends beyond the extended family. Members of an extended family cooperate to build that portion of the dwelling which they occupy. They sometimes plant gardens in common. A woman often gathers food with her sisters or her mother, and when brothers are members of the same extended family they frequently hunt together. Sometimes the entire extended family leaves the band for a while as a unit and goes on a hunting and gathering expedition.

The extended family is generally dominated by the oldest active male. Although his power is not supreme like that of the father in a nuclear family, younger members of the extended family usually pay heed to his words. The head of an extended family, however, does not possess any title, such as that of chief.

THE BAND

The local group or band is the largest social group to which a Siriono belongs. In a certain sense the band is also a kin group. Since bands rarely have contact with one another and are thus largely endogamous, it is possible for most band members to trace their descent through one line or another to every other band member.

One feature of Siriono society makes it most difficult for the ethnologist to determine the actual constitution of the band. A very active system of teknonymy operates to make the collection of genealogies an almost impossible task. Every time a Siriono is the father or the mother of a child, his name is changed to that of the child with an additional suffix indicating father or mother. This, coupled with the fact that nicknames are also frequently changed, makes it possible for an Indian to have as many as 15 or 20 names during the course of a lifetime. One's father, for instance, will not have the same name after one's own birth that he had after the birth of one's elder brother. Consequently, if the ethnographer asks two people, whom he knows to be brothers, the name of their father, he may get two entirely different names for the same person.

When I first began to work among the Siriono I remained entirely ignorant of the system of teknonymy until I began to collect genealogies. Analysis of these proved to be useless in establishing relationships between people whom I knew to be related. A dead ancestor was almost always referred to by as many names as I had informants. After 4 months' study at Casarabe—made difficult, of course, by the break-down of the old social organization—I was unable to check my findings by genealogies because of the operation of teknonymy, even though I had acquired a fairly complete knowledge of the kinship system and the rules of marriage through face-to-face relationships.

By the time I got to Tibaera, of course, my knowledge of the language had increased considerably and I was well aware of the system of teknonymy. Thus when I returned from the forest with the band of Ačíba-eóko (Long-arm) in October, 1941, I threw away my old genealogies and began systematically to collect new ones from almost every member of this group. Careful analysis of this material, though much of it proved useless, revealed that, even with the operation of teknonymy, certain nicknames in particular tended to persist, and I was thus able to get a number of reliable instances where two men who said they were brothers actually did have the same father and mother. Once having a tangible basis of this kind to work upon, I was able to trace out rather fully, by checking back on old names, a

number of genealogies and to work out the kinship system and rules of marriage. I was never able, however, to determine the actual kinship of every band member to every other band member, even though I could record the kinship terms by which they designated each other.

In the 5 extended families who made up the entire band of Ačíba-eóko there were 17 nuclear families, all of whom were monogamous except 4. In the 4 extended families who made up the entire band of Eantándu there were 14 nuclear families, all of whom were monogamous except 3. In both bands the chiefs maintained more than one wife: Ačíba-eóko had two, while Eantándu had three. The total population of the band of Ačíba-eóko was 94. Of this number, 25 were adult males, 30 adult females, 18 preadult males, and 21 preadult females. The total population of the band of Eantándu was 58; 17 were adult males, 19 adult females, 10 preadult males, and 12 preadult females. The average number of children per family, considering both bands as a whole, was about 2; in the band of Ačíba-eóko it was 2.3, while in the band of Eantándu it was 1.6. Since the latter band had had considerable contact with the whites, a number of their children had been stolen from them.

Each band occupies a single dwelling, within which cluster the extended families. The chief and his extended family always occupy the center of the house, while the other extended families spread out from his in both directions. During the rainy season, when travel is difficult, the band is a fairly cohesive unit, but during the dry season it is much more loosely organized. At this time nuclear and extended families are often away from the band on hunting and collecting trips that sometimes last 3 weeks or a month.

The chief function of the band seems to be that of supplying sex and marital partners. It performs few economic or ceremonial functions and is held together largely by ties of kinship.

The Siriono have a very weakly developed tribal sense. While bands occasionally come in contact with each other in their wanderings, there are no ceremonial occasions when they all come together. When contacts between bands do occur, however, relations are peaceful.

Bands possess no prescribed territories. If one band runs across hunting trails of another, however, they do not hunt in that area. When I was

traveling with Indians of one band in the neighborhood of a house of another, they were reluctant to do any hunting. Informants told me that where trails of another band existed, the animals of that area belonged to the people who made the trails.

KINSHIP SYSTEM

There are only 11 fundamental kinship terms by which relatives are designated among the Siriono. As can be seen by examining charts 1, 2, 3, and 4 and the list of terms given below, the kinship system is a highly classificatory one; many relationships are signified by a single term.

Kinship term:	<i>Relatives to whom applied</i> ¹
(1) ámi.....	Father's father. Father's father's brother. Father's father's sister's son. Father's mother's brother. Father's mother's brother's son. Mother's father. Mother's father's brother. Mother's father's brother's son. Mother's mother's brother. Mother's mother's brother's son. Mother's mother's sister's son. Mother's brother. Father's sister's husband. Father's sister's son (M. S.). Wife's father (M. S.). Wife's father's father (M. S.). Sister's husband (M. S.). Husband's father (F. S.). Husband's father's father (F. S.). Husband's sister's husband (F. S.). Old man.
(2) ári.....	Father's mother. Father's mother's sister. Father's mother's sister's daughter. Father's father's brother's daughter. Father's father's sister's daughter. Mother's mother. Mother's mother's sister. Mother's mother's brother's daughter. Mother's brother's wife. Father's father's sister. Father's sister. Father's sister's daughter. Wife's mother (M. S.). Wife's mother's mother (M. S.). Husband's mother (F. S.).

Kinship term:	<i>Relatives to whom applied</i> ¹
(2) ári (con.)----	Husband's mother's mother (F. S.). Husband's sister (F. S.). Old woman.
(3) éru.....	Father. Father's brother. Mother's sister's husband. Father's father's brother's son. Father's mother's sister's son. Stepfather.
(4) ézi.....	Mother. Mother's sister. Father's brother's wife. Father's mother's brother's daughter. Father's father's brother's daughter. Mother's mother's sister's daughter. Stepmother.
(5) anóNge-----	Brother. Sister. Mother's sister's son. Mother's sister's daughter. Father's brother's son. Father's brother's daughter. Half brother. Half sister.
(6) yánde.....	Mother's brother's daughter (M. S.). Wife's sister (M. S.). Wife's sister's husband (M. S.). Father's sister's son (F. S.). Husband's brother (F. S.). Husband's brother's wife (F. S.). Potential wife (M. S.). Potential husband (F. S.).
(7) akwaníndu---	Mother's brother's son. Mother's brother's son's son. Father's sister's daughter's son. Son-in-law. Mother's sister's daughter's son (M. S.). Sister's son (M. S.). Father's brother's daughter's son (M. S.). Father's sister's son's son (M. S.). Wife's brother (M. S.). Mother's brother's daughter's son (F. S.). Mother's sister's son's son (F. S.). Brother's son (F. S.). Father's brother's son's son (F. S.).
(8) akwáni.....	Mother's brother's son's daughter. Daughter-in-law. Mother's sister's daughter's daughter (M. S.). Sister's daughter (M. S.).

¹ Male and female speaking unless otherwise designated.

○ = Female
 Δ = Male

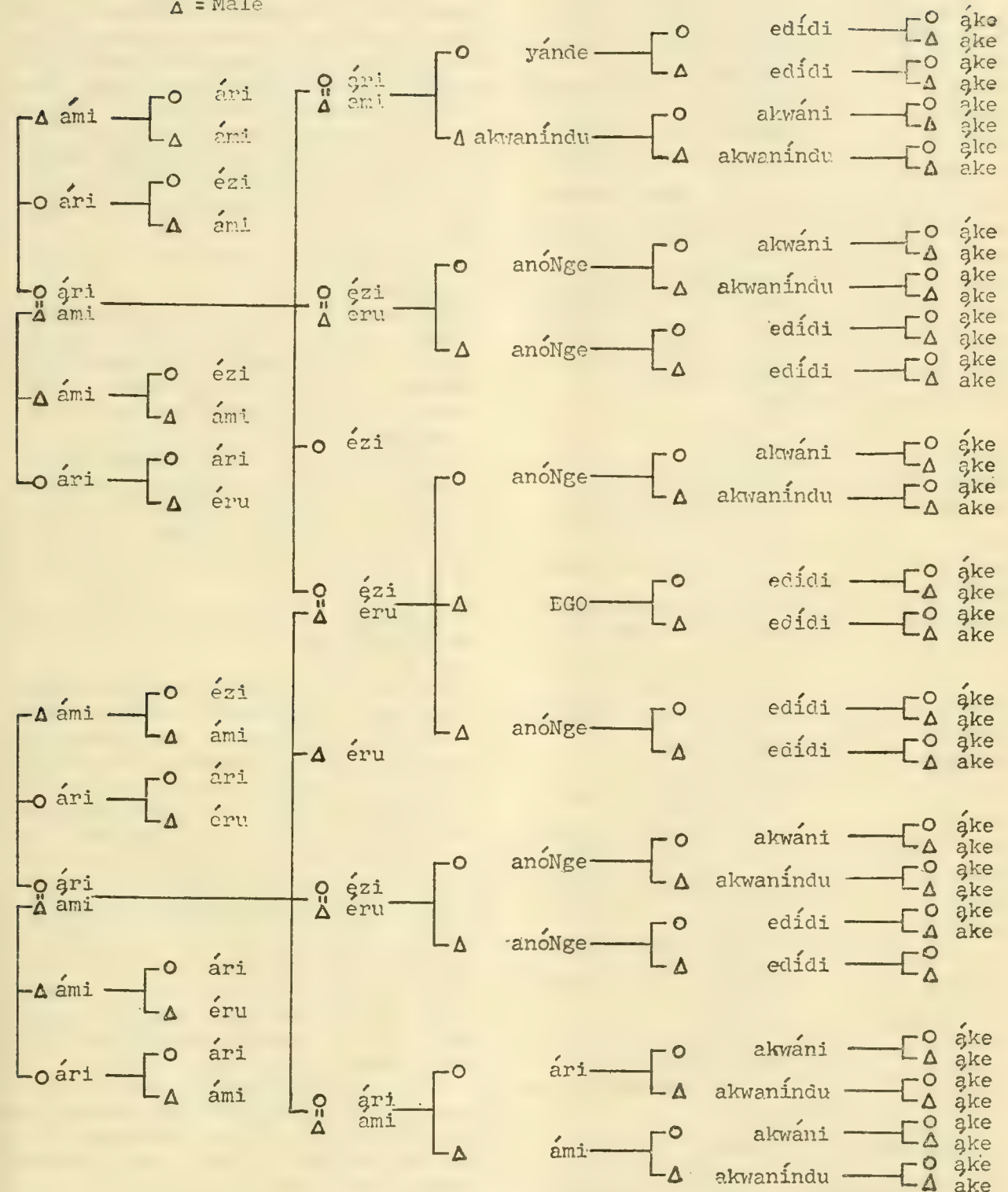


CHART 1.—Lineal kinship chart Siriono (male speaking).

Kinship term:

Relatives to whom applied

- (8) akwáni (continued) Father's brother's daughter's daughter (M. S.).
 Father's sister's daughter's daughter (M. S.).
 Father's sister's son's daughter (M. S.).
 Wife's brother's wife (M. S.).
 Mother's brother's daughter (F. S.).
 Mother's brother's daughter's daughter (F. S.).
 Mother's sister's son's daughter (F. S.).
 Brother's daughter (F. S.).
 Father's brother's son's daughter (F. S.).
 Father's sister's daughter's daughter (F. S.).
 Brother's wife (F. S.).
- (9) edídi----- Son.
 Daughter.
 Stepson.
 Stepdaughter.
 Brother's son (M. S.).
 Brother's daughter (M. S.).
 Father's brother's son's son (M. S.).
 Father's brother's son's daughter (M. S.).
 Mother's sister's son's son (M. S.).
 Mother's sister's son's daughter (M. S.).
 Mother's brother's daughter's daughter (M. S.).
 Mother's brother's daughter's son (M. S.).
 Sister's son (F. S.).
 Sister's daughter (F. S.).
 Father's brother's daughter's daughter (F. S.).
 Father's brother's daughter's son (F. S.).
 Father's sister's son's son (F. S.).
 Father's sister's son's daughter (F. S.).
 Mother's sister's daughter's daughter (F. S.).
 Mother's sister's daughter's son (F. S.).
- (10) áke----- Grandson.
 Granddaughter.
 Child of nephew or niece.
 Child of first cousin once removed.
 Child.
- (11) ninínízi²----- Wife (M. S.).
 Husband (F. S.).

Kinship terms are more frequently used in address than personal names or nicknames. The latter, however, are sometimes employed in address and frequently (particularly nicknames) in reference. In husband-wife relationships, moreover, special teknonymic usages prevail. After a child has been born, a man addresses his wife as *akési* (mother-of-child) and he is addressed by her as *akéndu* (father-of-child). These usages, so far as I know, do not extend to other relationships.

The outstanding characteristics of the kinship system are the following:

(1) Kinship is bifurcate-merging. The father's brother is classified with the father, while the mother's brother is designated by another term; similarly, the mother's sister is classified with the mother, while the father's sister is designated by another term.

(2) Grandparents are not distinguished in kinship terminology. Grandfathers and their brothers are designated by the same term as mother's brother, while grandmothers and their sisters are designated by the same term as father's sister.

(3) No sex distinctions are made between siblings and parallel cousins, all of whom are designated by one term.

(4) Cross-cousins are distinguished from parallel cousins, and the cross-cousin terminology reflects the system of marriage. A man marries his mother's brother's daughter, a woman her father's sister's son. Marriage between a man and his father's sister's daughter or between a woman and her mother's brother's son is forbidden. The cross-cousins whom one can marry are referred to by the term "potential spouse." The father's sister's children are terminologically classified with the father's sister and her husband, i. e., they are raised one generation, while the mother's brother's children are classified with nephews and nieces, i. e., they are terminologically depressed one generation. On the basis of cousin terminology the kinship system is thus of the Crow type.

(5) No sex distinctions are made between son and daughter, both of whom are designated by the same term, and this term is extended to include the children of siblings and of parallel cousins of the opposite sex.

(6) Special terms showing sex differences are employed to designate the sons and daughters of

² I am not positive that this term is applied to both husband and wife. Since the kinship system makes no sex distinctions between potential husband and potential wife, I am fairly certain that the same term is applied to actual husband and wife.

Δ = Male

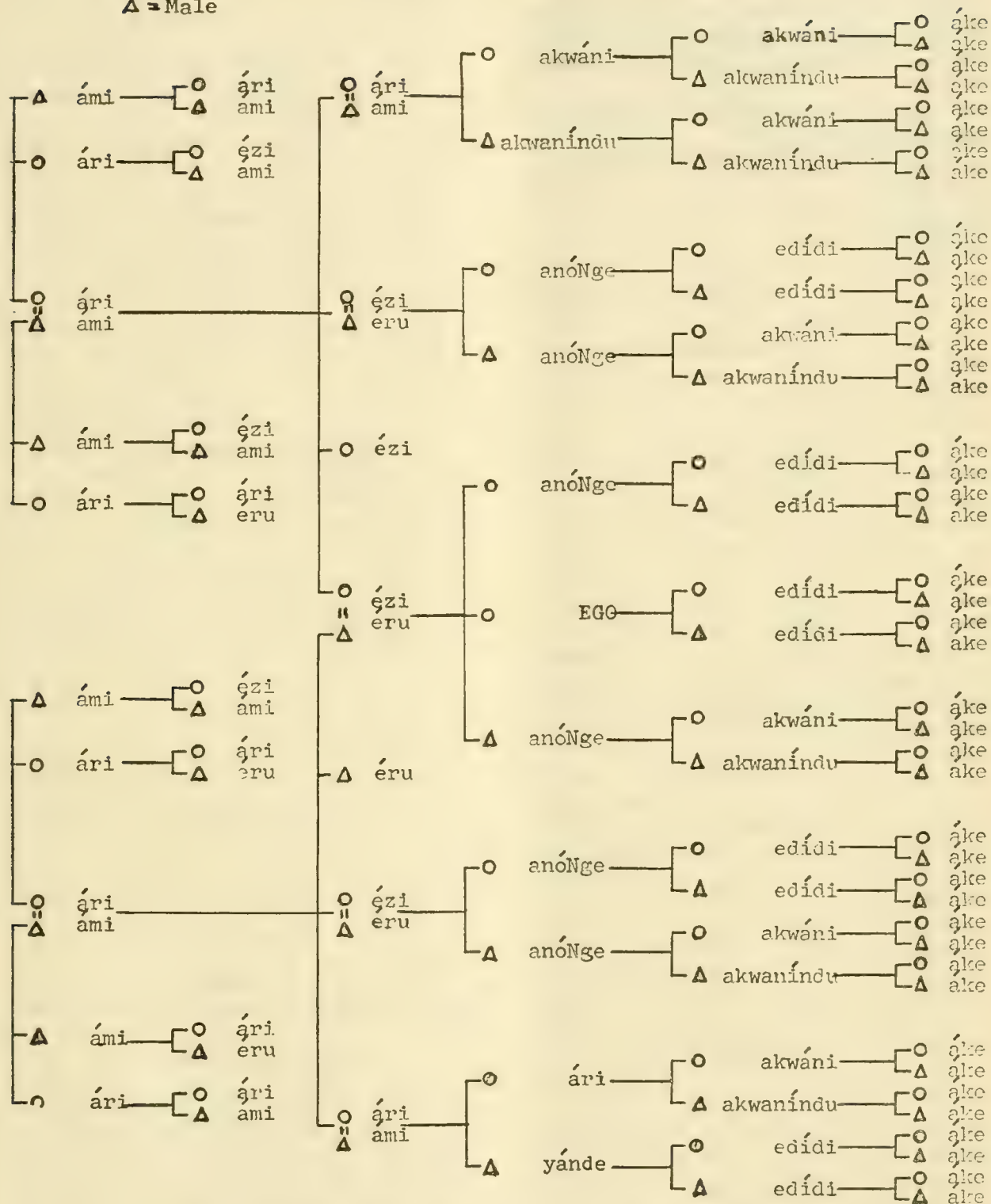


CHART 2.—Lineal kinship chart Siriono (female speaking).

siblings and parallel cousins of the opposite sex.

(7) No sex distinctions are made between grandson and granddaughter, or the children of nephews and nieces, all of whom are called by one term.

(8) There are no special affinal terms except the one for actual spouse.

(9) No age distinctions are made for any type of relatives.

○ = Female
Δ = Male

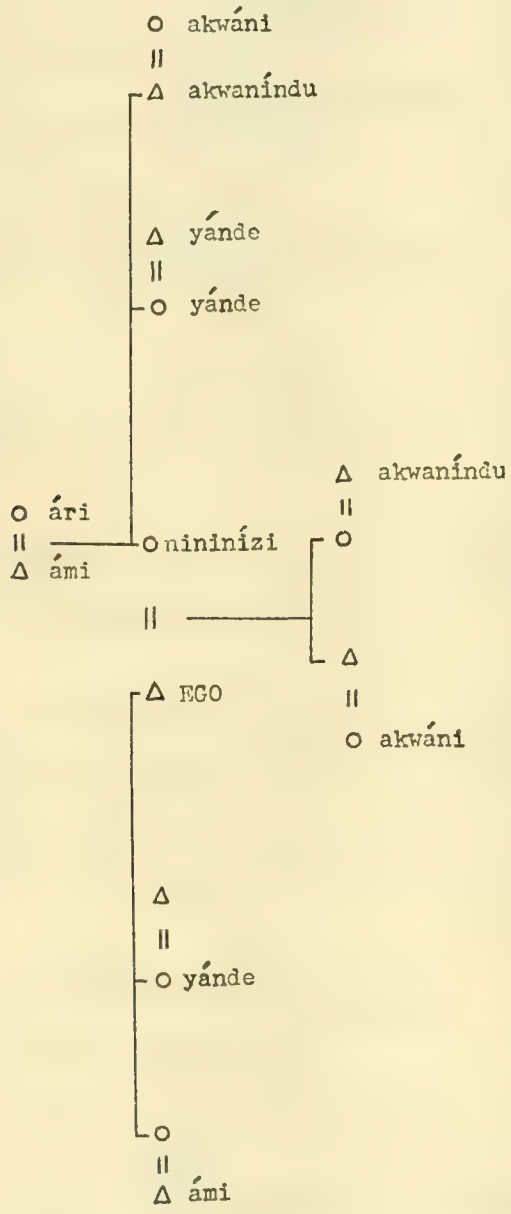


CHART 3.—Affinal kinship chart Siriono (male speaking).

○ = Female
Δ = Male

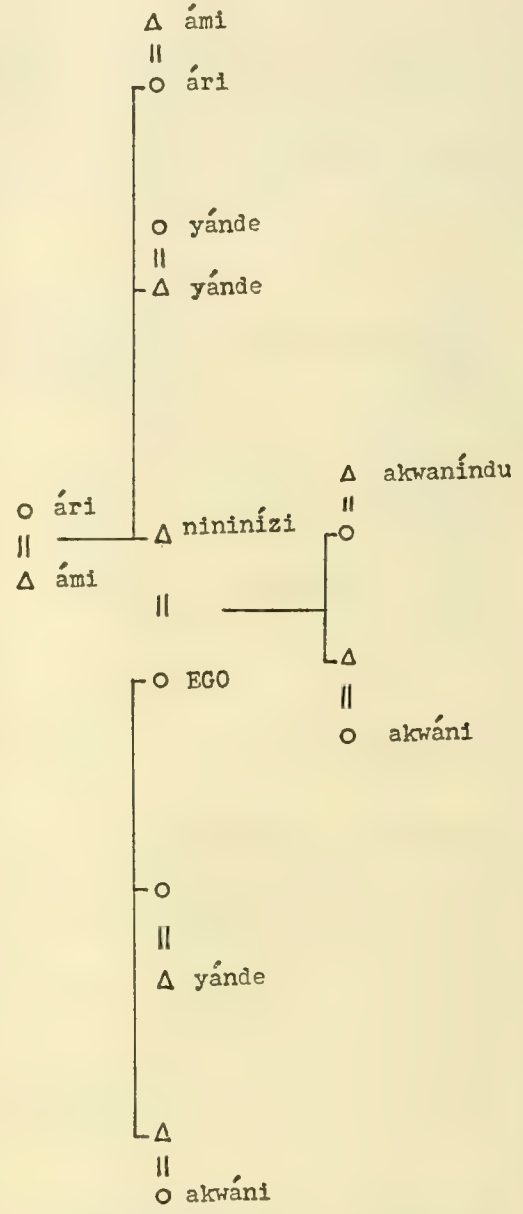


CHART 4.—Affinal kinship chart Siriono (female speaking).

KINSHIP BEHAVIOR

Generally speaking, there are no formalized, obligatory patterns of kinship behavior. Brother-sister avoidance, parent-in-law taboos, joking relationships, etc. are lacking. However, patterns of relative reserve and freedom are clearly noticeable between certain relatives.

Relationships between husband and wife are

free and easy. Sex play in the form of scratching, poking each other in the eyes, grooming, striking at each other's sexual organs, joking, etc., is publicly indulged in without concern.

Potential husbands and wives to some extent share the patterns of freedom that exist between husband and wife. This is especially true as regards the relations between a man and his wife's sister or a woman and her husband's brother. But as the nearness of relationship between potential spouses decreases, the patterns of freedom in their public relations also decrease. The principal reason for this seems to be the jealousies that arise out of too frequent sexual intercourse between distantly related potential spouses, which sometimes result in fights and quarrels. On the whole, however, the relationships between potential spouses are patterned along the lines of those actually existing between husband and wife.

Between parents and young children there is little reserve. The latter are treated very indulgently and are seldom punished for breaches of custom. As children grow older, however, they are expected to respect and to obey their parents, who treat them roughly in case they do not. A person's respect for his parents continues after marriage until the latter grow old and useless, after which little concern is shown for them.

A certain reserve can also be noted in the relationships between siblings of the opposite sex; this never reaches the point of avoidance, however. Brothers and sisters are allowed to speak freely to one another—and otherwise maintain cordial relations—but a taboo on sexual behavior between them is instilled in early childhood. The sexual taboos between brother and sister are generalized to include all relatives classed as siblings by the kinship system.

The freest relationships of all are those between siblings of the same sex and of about the same age. From earliest childhood brothers, like sisters, begin to associate with each other, and the close bonds established at this time continue and strengthen throughout life. Brothers frequently marry sisters; they have the same potential wives; they hunt, fish, and plant gardens together. Conversely, sisters frequently marry brothers; they have the same potential husbands; they collect, cook, and carry out household tasks together. Under conditions of this kind, of course, binding ties are formed, so that brothers often enjoy secrets

with brothers, and sisters with sisters, that are not even shared by husband and wife. Thus, throughout life one's most intimate friend and companion is most likely to be one's sibling of the same sex and of about the same age.

Grandparent-grandchild relationships are rare. When they do occur, a grandchild is supposed to show respect for his grandparents equal to that which he shows for his parents. In general, however, grandparents have little to say about how grandchildren are to be raised. A grandmother may weave a baby sling for her grandchild, or a grandfather may make a toy bow and arrows for his grandson, but such things are more often made by parents than by grandparents.

Although there are no taboos between parents-in-law and children-in-law, the relationships between these relatives are the most reserved of all. Because of matrilocal residence a woman is able to avoid most direct contacts with her parents-in-law, but a man, while in the house, is almost constantly thrown into contact with his parents-in-law by virtue of the fact that his (and his wife's) hammock hangs not 3 feet from theirs, with nothing more than a few embers of fire to separate them. Under these intimate and frustrating circumstances it is rather strange that no mother-in-law taboo has arisen to help in keeping peace between the families, but this has not happened. The fact of kinship ties—both husband and wife are related to their in-laws by blood—probably does much to lessen the friction that otherwise might arise between them.

While overt behavior between in-laws is usually polite and reserved, suppressed aggression sometimes runs high. This is particularly true in cases where a man is living with his mother-in-law whose husband is dead, for he then has to supply her with food without receiving anything in return. Widowed mothers-in-law have substantial appetites and contribute almost nothing to the family larder. Consequently their sons-in-law regard them as liabilities and avoid relations with them whenever possible.

Artificial ties of kinship such as blood brotherhood and ceremonial parenthood are absent. In this connection, the Franciscan priest, Anselm Schermair (1934, p. 520), has implied that the Siriono possess a form of godparenthood. He states that the term *yánde* is applied to people who stand in the relationship of godparent to one's

child. Actually this is not the case. As we have already pointed out, the term *yánde* is used to designate a potential spouse. What confused the padre and led him to mistake a potential spouse for a godparent is doubtless the following fact. In the ceremonies following childbirth, potential spouses of the mother—those who have had sex relations with her—are frequently decorated with feathers and undergo the rites of *couvade* like the parents themselves. This is logical enough in view of the fact that the Siriono recognize a very close relationship between parent and child and that one of the woman's potential husbands may, after all, have been responsible for the pregnancy. Moreover, if anything should happen to the parents of the child, those relatives who stand in a *yánde* relationship, i.e., those relatives who are potential spouses of the parents, are responsible for its upbringing and its care. In view of the circumstances, namely, that people of the opposite sex who stand in the *yánde* relationship have sex relations with one another, they can hardly be regarded as godparents in the usual sense of the term.

SOCIAL STRATIFICATION

Beyond the stratifications of sex and age, Siriono society is little differentiated as to status. A form of chieftainship does exist, but the prerogatives of this office are few. Such status divisions as castes, social classes, and specialized occupations are quite unknown.

Apart from age and sex, such status differences as do exist depend primarily upon how the duties of everyday life are performed. If a man is a good hunter, his status is apt to be high; if he is a poor provider, it is apt to be low. His status as a hunter, moreover, is enhanced considerably by his being a virile sex partner; having several wives is a mark of distinction. A woman's status, too, depends not only on her being active in the economic pursuits of the family but on her being a good childbearer as well. A childless woman stands at the bottom of the status hierarchy within the family.

Little status is gained through genealogy. Within the band, those people who are most closely related to the chief probably enjoy the greatest number of privileges, but I was unable to confirm this as an outstanding feature of Siriono society. It is probably true, to be sure, that the

brother of a chief enjoys more privileges than a distantly related cousin. But in a society like the Siriono, where the food supply is both scarce and insecure, a person's status necessarily depends more on his ability as a provider of food than on any other single factor. This was clearly brought home to me time and time again while I was at Tibaera.

One case deserves special mention. Enía (Knee) was the brother-in-law of Chief Eantándu. He had had some contact with the outside, but because of maltreatment had run away from his patron and returned to native life. He was an intelligent man with an unusual ability (for a Siriono) to adjust to white civilization. He was a hard worker and reliable, and he knew considerable Spanish. His one weakness was that he could not hunt as well as his countrymen. Time after time I saw him leave with his bow and arrows, and time after time I watched him return empty-handed, while his fellow tribesmen left after him on the same trail and returned with game. He was generally referred to as "not knowing how to hunt." He was openly insulted at drinking feasts for his inability to hunt. He had lost at least one wife to better men. His status was low; his anxiety about hunting, high. He had, however, made some kind of readjustment to native life by planting more crops and collecting more forest products than the others and trading some of his vegetable products for meat. But still he was not satisfied. Noting this condition, I set out to raise his status. First he accompanied me with his bow and arrows on hunting trips. He carried in game which I shot, part of which was given to him and which we told others was shot by him. His status began to improve. Shortly thereafter I taught him to use a shotgun, and he brought in game of his own. Needless to say, when I left Tibaera he was enjoying the highest status, had acquired several new sex partners, and was insulting others, instead of being insulted by them.

Several wives and numerous children are the principal status marks of a man. Similarly, to be married to a man who is a good hunter and to have several children are the most important status marks of a woman. Plural wives not only mark a man as a good hunter but as a virile sex partner as well. Men boast a great deal about their sexual prowess, as well as their hunting prowess, and in cases where they are married to

several wives they are careful to see that only allowable sex partners have any relations with them. Consequently, when overnight trips are made into the forest, a man generally takes all of his wives with him.

Rigidly marked age groupings are not found in Siriono society, although there is a recognition, as in most societies, of the categories of infancy, childhood, adulthood, and old age. Except in the case of the premarital rites for girls, the physiological changes that accompany maturation are little recognized or celebrated by special ceremony. As a mark of adulthood, however, men and women, after they are married and have children, are stabbed in the arms with the dorsal spine of a sting ray, which practice leaves scars that are signs of maturity. As a person grows older, bloodletting is continued—to rejuvenate him by getting rid of his old blood. The society thus seems to recognize that the sharpest break in age occurs between childhood and adulthood. The other transitions are very gradual and are not marked by ceremony.

It is difficult to generalize as to the status of women. Although they are dominated by the men, it can hardly be said that women occupy a position much inferior to that of the men when one considers the conditions under which this society exists. During childhood there is no noticeable preferential treatment of boys. On the basis of the sex division of labor the men do as much or more work than the women. Hunting is exclusively a task of the men, while collecting and agriculture are joint pursuits of both men and women. Women enjoy about the same privileges as men. They get as much or more food to eat, and they enjoy the same sexual freedom. They are not restricted from holding drinking feasts and dances, nor from participation in bloodletting ceremonies. After marriage, moreover, women continue to live with their parents and to enjoy the latter's protection.

CHIEFTAINSHIP

Presiding over every band of Siriono is a chief (*ererékwa*), who is at least nominally the highest official of the group. Although his authority theoretically extends throughout the band, in actual practice its exercise depends almost entirely upon his personal qualities as a leader. In any case, there is no obligation to obey the orders of a

chief, no punishment for nonfulfillment. Indeed, little attention is paid to what is said by a chief unless he is a member of one's immediate family. To maintain his prestige a chief must fulfill, in a superior fashion, those obligations required of everyone else.

The prerogatives of chieftainship are few. Although the title *ererékwa* is reserved by the men for a chief, if one asks a woman, "Who is your *ererékwa*?" she will invariably reply, "My husband." The principal privilege of a chief, if it could be called such, is that it is his right to occupy, with his immediate family, the center of the house. Like any other man he must make his bows and arrows, his tools; he must hunt, fish, collect, and plant gardens. He makes suggestions as to migrations, hunting trips, etc., but these are not always followed by his tribesmen. As a mark of status, however, a chief always possesses more than one wife.

While chiefs complain a great deal that other members of the band do not satisfy their obligations to them, little heed is paid to their requests. I was told, for instance, both by Indians and by whites who had had contact with them, that the chief was entitled to a share of every catch of game that was made. While I was living at Tibaera, I had an excellent chance to check this matter empirically, and I found that this was not, as said, usually the case, but rarely so. The more general rule was to avoid giving the chief anything, if possible.

The following is an example of the sort of thing that was constantly occurring at Tibaera. Kwádu (Porcupine), a member of the band and extended family of Aćíba-eóko (Long-arm), the chief, was absent for several days with his younger brother on a hunting expedition. On returning to camp, they brought with them about a dozen tortoises of good size. These were tied up with lianas and hung on beams in the house, one or two of them being butchered each day. Aćíba-eóko, desiring meat, first made a direct request to Kwádu, but was brushed off and given nothing. Following this he made public remarks without mentioning names that *mbía* (countrymen) were keeping all the meat to themselves and not giving any to him, the chief. The owners of the tortoises still paid no attention to him. Finally, after about 3 days, Aćíba-eóko, having received nothing, became so angry that he left for the hunt

with his family and stayed away for about a week. He returned with considerable roast meat which he distributed to no one else but members of his immediate family.

In general, however, chiefs fare better than other members of the band. Their requests more frequently bear fruit than those of others, because chiefs are the best hunters and are thus in a better position than most to reciprocate for any favors done them. In speaking of chiefs, both past and present, informants always referred to them as "big men." Chiefs know the most about hunting, about the habits of animals, about how best to surround a band of peccaries; they are the best composers of songs, the most powerful drinkers; they know the most about hunting tapirs and harpy eagles; they have the most wives and children. In short, chiefs know more about things and are able to do them better than anyone else. Consequently, they command more respect than the average man.

Chieftainship is normally a hereditary office and passes patrilineally from father to eldest son, provided the latter is a good hunter, is mature, and possesses the personal qualities of leadership. In case an eligible son is lacking, the office may pass to the chief's brother. It so happens that the chiefs whom I knew had both inherited the office from their fathers. One of them told me, however, that were he to die the office would be inherited by his younger brother, because he had no eligible son to whom it could pass.

LAW AND SOCIAL CONTROL

The legal system by means of which the relations between band members are governed is not an elaborate one. In such a simple society as that of the Siriono, most members of which are united by ties of blood, only a small body of customary law is needed to maintain what order does exist. Moreover, the social norms that prevail are elastic enough to allow for a considerable range of behavior, depending upon the immediate conditions of life. Thus, although one of the important legal norms is that of sharing food within the extended family, such sharing rarely occurs unless the supply of food is abundant. Frequently, in fact, food sharing does not go beyond the nuclear family, even though the quantity of food may be more than adequate to take care of immediate needs. Under such conditions, one may be

accused of hoarding food, but the other members of the extended family can do little about it except to go out and look for their own.

Within this society, the formal agencies of social control are almost entirely lacking. No such thing as a police force exists, and, as we have already seen, chieftainship, although theoretically an office of some power and distinction, is actually relatively unimportant as a means of controlling behavior. A chief does not interfere in the disputes of others, and when involved in disputes of his own, others pay little attention to them. Sorcery, moreover, is almost unknown as a means of social control. The handling of one's affairs is thus largely an individual matter; everyone is expected to stand up for his own rights and to fulfill his own obligations.

In spite of the extreme individualism of the Siriono in this respect, there are, nevertheless, certain incentives to conform to the legal norms that do exist. If, for instance, a person does share food with a kinsman, he has the right to expect some in return, and if a man does occasionally share his wife with a brother, he has the right occasionally to share that brother's wife. Reciprocity, however, is almost always forced, and is sometimes even hostile. One usually has to demand something in return for that which one has reluctantly given. Indeed, sharing rarely occurs without a certain amount of mutual distrust and misunderstanding; a person always feels that it is he who is being taken advantage of. Nevertheless, this type of forced reciprocity does seem to be one of the principal rewards of conformity.

So intense is the individualism of the Siriono and so elastic the legal system, that crime and punishment are rare. Murder is not condoned but is almost unknown. Only two cases, both of which happened a number of years ago, came to my attention. In one of these a man killed his wife with his bow and arrow during a drinking feast, and in the second a man killed his sister by throwing a club at her from a tree. In both instances the murderers were banished (or left) the band for a considerable time, but they returned later and resumed normal life.

Cases of premeditated murder were unknown. Informants told me, however, that under circumstances of this kind the *lex talionis* would be rigidly applied. Accidental homicide is not punished,

and other offenses against life, such as abortion and infanticide, seem to be unknown.

Minor assaults, resulting from quarrels that take place over food and sex or from those that arise during drinking feasts, are relatively common. While physical aggression against one another during quarrels meets with a certain amount of public disapproval, it usually goes unpunished. Assaults, however, often result in strained relations between the parties involved for some time after they happen.

The absence of rigidity in standards of morality makes for relatively few offenses in the realm of sex. Such crimes as incest and rape are rare. When they do occur, they are believed to be followed by an automatic supernatural sanction: the offender becomes sick or dies. Adultery, on the other hand, is common, and if committed discreetly frequently goes unpunished. If adultery occurs too often, however, an irate husband casts out his wife and she becomes subject to public ridicule. She is accused of being *ečimbási*, i. e., of having too strong sex desires.

Theft is unknown, except in the realm of food. Even the stealing of food rarely occurs because the conditions giving rise to the crime seldom exist: food is not plentiful, and one's immediate supply is hastily eaten. Some theft of food takes place at night, especially by the aged, but in instances of this kind the guilty parties receive no other punishment than that of being publicly accused of the crime, which they always emphatically deny.

Justice is an informal and private matter. Grievances are settled between the individuals involved, or among the members of the family in which they occur. Generally speaking, it would seem that the maintenance of law and order rests largely on the principal of reciprocity (however forced), the fear of supernatural sanctions and retaliation, and the desire for public approval.

INGROUP CONFLICT

One cannot remain long with the Siriono without noting that quarreling and wrangling are ubiquitous. Hardly a day passes among them when a dispute of some kind does not break out. Quarrels are especially common between husband and wife, between cowives, between sons-in-law and parents-in-law, and between children of an extended family, but they occur between all types of people,

relatives and nonrelatives. Quarrels are usually settled between the disputants who start them. This is especially true of those which take place in the nuclear and extended families. If a man is quarreling with his wife or mother-in-law, for instance, other people seldom intervene. If two members of different extended families become involved in a quarrel, however, relatives of the disputants may come to their aid. Children, for example, are frequently observed striking women with whom their mothers are quarreling, and brothers often come to each other's aid if they get involved in a quarrel outside of the family. The Siriono, however, maintain no arbiter of disputes. The chief, for instance, seldom takes part in settling differences that occur outside of his family.

Data were recorded on 75 disputes that came to my attention, apart from those that took place at drinking feasts. It is significant to note that 44 of them arose directly over questions of food (mostly between women or between husband and wife); 19 broke out over questions of sex (between husband and wife, cowives, and women); only 12 were assignable to various other causes. Here we have overwhelming evidence of the important role played by food in Siriono society. It is the most prominent cause of ingroup strife.

People constantly complain and quarrel about the distribution of food. They accuse each other of not sharing food, of hoarding food, of eating at night, and of stealing off into the forest to eat. This was particularly noticeable at Tibaera, where Silva and I made considerable effort to initiate cooperative planting of gardens—a custom foreign to the Siriono under aboriginal conditions. Several acres of land were cooperatively cleared and planted with maize. While the maize was ripening, bitter complaints were registered, and quarrels took place over its distribution, although there was plenty of maize for everyone. People accused each other of stealing maize before it was ripe, of harvesting more than they had a right to, of transporting it into the forest and eating it on the sly. Men complained that they had done most of the work, while the women were eating most of the crop. In fact, few men ventured on the hunt at this time for fear of returning to find that others had eaten most of the crop of maize.

Quarreling over the allotment of meat is equally common. While the distribution of meat is ordi-

narily confined to the extended family because the supply is seldom abundant, there is usually someone within the family who feels that he is not getting his share. Especially do the men accuse the women of hoarding meat, of eating it when the men are not around, or of consuming more than their share. Eníá said to me one night, "When someone comes near the house, women hide the meat; they cover it with leaves. When you ask them where the meat is they tell you there is none. They eat in the night and steal off in the forest to eat."

The reluctance to share meat is clearly reflected in the behavior of returning hunters. The bigger the catch the more sullen the hunter. The hunter adopts this pose so as not to be approached for game. On returning from the hunt a man sometimes does not even carry his game into the house but leaves it beside the trail near the house and comes in empty-handed, aggressive, and angry. Upon entering the house he throws himself into the hammock. This is the signal for his wife or whoever else is around to bring him a pipeful of tobacco, which he smokes without saying a word. If he has brought the game into the house, his wife sets about to prepare it; if it is still out in the forest, she goes out to retrieve it. The hunter maintains his unapproachable manner until after the game has been cooked and eaten.

Quarrels over sex can hardly be divorced from those over food. In this respect men seldom express aggression against other men who have seduced their wives but center it on their adulterous wives. Women, on the other hand, express little aggression against their adulterous husbands but channel it against the women who have caused their husbands to err. Women are thus believed to be the cause of most sexual disputes. Women may chide their husbands for being unfaithful, but the fact that the men always respond with more violent accusations that the women are unfaithful usually settles the dispute before it culminates in a violent end.

Drinking feasts are occasions on which much latent antagonism and aggression are expressed between men. At these feasts men openly air their complaints, whether these have to do with food, with sex, or with any other subject of contention. The disputes are settled by wrestling matches, and are usually forgotten after the period of drunkenness is over. It is interesting to note

that aggression at drinking feasts is limited to wrestling matches; any other type of fighting is frowned upon and is usually stopped by non-participant men and women. On one occasion Eantándu, when drunk, struck an opponent with his fists. Everyone began to clamor that he was fighting unfairly, "like a white man." He stopped immediately.

Except at drinking feasts antagonisms seldom lead to violence, and even at these the participants are usually so drunk that they are unable to harm one another. On other occasions strong words are used between disputants, but fighting with weapons and clubs is rare. This is especially true of the men, who seldom express direct aggression against each other, although among women quarrels frequently culminate in battles with digging sticks.

Men often dissipate their anger toward other men by hunting. One day Eantándu was angry with Mbíku who had hunted coati and given him none. Flushed with anger, Eantándu picked up his bow and arrows and departed for the hunt. When he returned about 5 hours later with a couple of small monkeys, his wrath had subsided considerably. He told me that when men are angry they go hunting. If they shoot any game their anger disappears; even if they do not kill anything they return home too tired to be angry.

If enmity between families becomes intense, one of them may migrate to the forest for a while until hostile feelings subside; if it becomes unbearable, one of them may split off from the band and join another band, or several extended families may break off from the band and start a new band of their own. Seldom are differences so deep and lasting, however, that this latter method of adjustment need be resorted to.

WARFARE

Contrary to popular misconception the Siriono are not a warlike people. In this respect such writers as Nordenskiöld (1911, vol. 57, pp. 16-17) have created a distorted picture of them. Warfare between bands simply does not exist, and where the Siriono have come in contact with other peoples, Indian or white, it is they who have been raided and rarely they who have done the raiding. In fact, the entire history of the Siriono, from what little we know about it, seems to reflect a strategy of retreat rather than one of attack. Whenever

they have come in contact with other groups, they have been forced to retire deeper and deeper into the impenetrable jungle in order to escape defeat, and in retiring from previously occupied lands they seem to have made few firm stands in defense of their territory.

The distribution of the Siriono today seems clearly to bear witness to this policy of withdrawal in the face of contact. The aboriginal groups that still survive are spread over an extremely wide area, and they are located in isolated pockets of forest lands that are most inaccessible and least desirable, where they have no contiguous relations with one another and where they are surrounded by hostile peoples. Only the fact that the Siriono adhere to a seminomadic mode of existence and that the unpopulated lands of eastern Bolivia are still extensive and relatively rich in food plants and animals has made it possible for the few of them who still survive in the forests to stay beyond the reach of civilization and extinction.

The best evidence we have for the relatively unwarlike character of the Siriono comes from the culture itself. Here are not found the organization, the numbers, or the weapons with which to wage war, aggressive or defensive. Moreover, war does not seem to be glorified in any way by the culture. The child is not educated in the art of war, nor is there a warrior class among the adults. Furthermore, the care with which the Siriono avoid contacts with other peoples and the fear with which they regard their more warlike neighbors bear witness to the punishment they have suffered as a group in the past.

Attention should be called, however, to the fact that on occasions the Siriono have retaliated for outbreaks against them by others. While they seem rarely, if ever, to have responded to the attacks made upon them from the south by the

so-called Yanaiguas, and from the north by the Bauré, for the purpose of killing their men and capturing their women and children, they have sporadically killed whites and missionized Guarayos Indians (with bows and arrows), both in retaliation for killings and for the purpose of securing iron tools and food. The warlike reputation of the Siriono, in fact, seems to have grown up as a result of these few isolated and unorganized raids, which reached their peak during the last rubber boom (in the 1920's) when there was a large influx of rubber tappers into some of the areas occupied by them. The *siringueros*, whenever possible, ruthlessly murdered the Indians, who in turn occasionally retaliated by waylaying a rubber worker and dispatching him for his machetes and axes. But when the rubber boom ended in 1928, by which time the Siriono were probably in possession of an adequate supply of tools, most of the whites left the area and the raids stopped. Shortly thereafter peaceful contact was established by a few of the whites who remained in the region. Today the Siriono who wander in the vicinity of the Franciscan missions of Guarayos occasionally steal maize and manioc from the gardens adjoining them, but people are seldom killed as a result of these forays. Generally speaking, when the Guarayos have contacts with the Siriono, relations are cordial.

The enemies which the Siriono most fear today are the so-called Yanaiguas, who harass them in the south, and a small group of what are probably wild Bauré, who sometimes attack them in the north. Almost nothing is known of these two groups of Indians, except that they are unfriendly and warlike. Both tribes are equated by the Siriono under one term, *kurúkwa*, a kind of monster, and are carefully avoided by them whenever possible.

THE LIFE CYCLE

SEX*

Romantic love is a concept foreign to the Siriono. Sex, like hunger, is a drive to be satisfied. Consequently, it is neither much inhibited by attitudes of modesty and decorum, nor much enhanced by ideals of beauty and charm. The expression *šečubi* ("I like") is applied indiscrimi-

nately to everything that is enjoyable, whether it be food to eat, a necklace to wear, or a woman.

Although love is not idealized in any romantic way, there are certain ideals of erotic bliss, and a certain amount of affection exists between the sexes. This is clearly reflected in the behavior that takes place around the hammock. Couples frequently indulge in such horseplay as scratching and pinching each other on the neck and chest,

*Considerable material relating to sexual behavior was expurgated from the original manuscript.—EDITOR.

and poking fingers in each other's eyes. Lovers also spend hours in grooming one another: extracting lice from their hair or wood ticks from their bodies, and eating them; removing worms and spines from their skin; gluing feathers into their hair; and covering their faces with uruku (*Bixa orellana*) paint.

Since privacy is almost impossible to obtain within the hut where as many as 50 hammocks may be hung in the confined space of 500 square feet, more intercourse takes place in the bush than in the house. Relations also occur at night in the hammock, but more rarely so.

Generally speaking, great freedom is allowed in matters of sex. A man is permitted to have intercourse not only with his own wife or wives but also with her (their) sisters, real and classificatory. Conversely, a woman is allowed to have intercourse not only with her husband but also with his brothers, real and classificatory, and with the husbands and potential husbands of her own and classificatory sisters. Thus apart from one's real spouse, there may be as many as 8 or 10 potential spouses with whom one may have relations. There is, moreover, no taboo on relations between unmarried potential spouses, provided the women have undergone the rites of maturity. Virginity is not a virtue. Consequently, unmarried adults rarely lack sexual partners. In actual practice, relations between a man and his own brothers' wives, and between a woman and her own sisters' husbands, occur frequently and without censure, but those with potential spouses more distantly related occur less often and are apt to result in quarrels or lead to divorce.

Food is one of the best lures for obtaining extra-marital sex partners, and a man often uses game as a means of seducing a potential wife. Failures in this respect result not so much from a reluctance on the part of a woman to yield to a potential husband who will give her game, but more from an unwillingness on the part of the man's own wife or wives to part with any of the meat that he has acquired, least of all to one of his potential wives. In general, the wife supervises the distribution of meat, so that if any part of her husband's catch is missing she suspects him of carrying on an affair on the outside, which is grounds for dispute. Hence, instead of attempt-

ing to distribute meat to a potential wife after game has already been brought in from the forest, a man may send in some small animal or a piece of game to the woman through an intermediary, and thus reward her for the favors he has already received or expects to receive in the future.

Fights and quarrels over sex are common but occur less often than fights over food. As has been pointed out, such quarrels arise largely as a result of too much attention to a potential spouse to the neglect of the actual spouse; this is really what adultery amounts to among the Siriono. However much men are chided by their wives for deceiving them, this seems to have little effect on their behavior, for they are constantly on the alert for a chance to approach a potential wife, or to carry on an affair with a *yukwaki* (young girl) who has passed through the rites of puberty. In plural marriages, however, I rarely noted pronounced jealousy between the wives, possibly because most plural marriages are of the sororal type.

In all these relations, basic incest taboos must be strictly observed. That is to say, it is strictly forbidden to have intercourse with any member of one's nuclear family, except one's spouse. Among the Siriono these incest taboos are generalized to include nonfamily members who are designated by the same kinship terms as those used for members of the nuclear family. Consequently, one may not have relations with a parallel cousin, with the child of a sibling of the same sex, with the child of a parallel cousin of the same sex, with a sister or parallel cousin of the mother, with a brother or parallel cousin of the father, or with the child of anyone whom one calls "potential spouse." In addition to these taboos, which are clearly reflected in the kinship system, relations with the following relatives are also regarded as incestuous: Grandparent and grandchild, parent-in-law and child-in-law, uncle and niece, aunt and nephew, a woman and her mother's brother's son, and a man and his father's sister's daughter.

Violations of incest taboos are believed to be punished by the supernatural sanction of sickness and death. However, I never heard of a case of incest occurring among the Siriono, even in mythology. The reason for this probably lies in the fact that the sex drive is rarely frustrated to

such an extent that one is tempted to commit incest.

Atypical sex behavior is also rare. Insofar as I could tell, only one man showed any tendency toward homosexuality, but this never reached the point of overt expression. He had never had a wife, and spent most of his time with the women. He lived next to his only brother, was regarded as harmless, and made his living largely by collecting and trading some of his products for meat. Another man was accused by the women of being sadistic and for this reason had no wife. His nickname was Etoni (Lazy), one which he had received because of the following ingenious device. He was an expert at tracking tortoises. He would gather as many as 10 of them at a time and hang them up alive on a beam in the house. He would then butcher one or two each day, meanwhile resting in his hammock, until the supply was gone. He spent long periods of time alone in the forest, and was one of the few Siriono out of whom I could worm no information whatsoever.

Chastity not being a virtue, there are few occasions when sex is taboo among the Siriono. During menstruation sex relations are forbidden, but during pregnancy they are recommended and indulged in up until shortly before delivery. Following childbirth, a woman refrains from intercourse for about a month, but there is no prescribed period after delivery that she must abstain. Following the death of a spouse, a widow or widower may resume sex relations within a matter of 3 days. There are, moreover, no other ritual or ceremonial occasions when adults are restricted from participation in sexual activity.

REPRODUCTION

With respect to conception, there is no lack of knowledge that it is caused by sexual intercourse. All informants agreed that a woman could have a child by no other means. But no crystallized theories of how the process takes place have been formulated. Constant interviewing on this subject yielded nothing but negative results.

The relationship between menstruation and pregnancy is also clearly recognized by the Siriono, but again their ideas on these matters have not attained crystallized form. Informants were convinced that women had to menstruate before they could have children, but they were unable to supply any of the reasons why. My

investigation on these questions, moreover, led me to the conclusion that the Siriono do not correlate the menstrual cycle with the lunar cycle in any special way.

In a certain sense a distinction is made between menstrual blood and ordinary body blood. The former is always designated as *eréN erúki* (vagina blood), while the latter is simply referred to by the general term *erúki* or "blood." What the differences between them are, however, the Siriono are quite unable to explain except in the vaguest sense. Contact with menstrual blood, especially in sexual intercourse, is regarded as harmful, while contact with ordinary body blood is considered innocuous.

Although menstrual blood is looked upon as something dangerous to the Siriono, they have not developed attitudes of disgust or horror toward it. During menstruation women wear nothing; they are neither isolated from the rest of the group nor restricted from participation in such household activities as cooking that bring them into intimate contact with other people. While menstruating women bathe more often during the menstrual period than at other times, they are not subject to food taboos and are not even required to sleep apart, although no sexual intercourse is indulged in at this time. All of my male informants told me that they had never had intercourse with a menstruating woman and that to do so was very dangerous, but there were varied opinions as to what might happen to those who did. It was generally thought that they would become "blood sick" and die.

One of the principal signs of pregnancy is the cessation of the menses. If a woman has never before been pregnant, however, some doubt may be expressed as to whether she is going to have a child until her breasts begin to swell.

Few other signs of pregnancy seem to be recognized. An extended abdomen is an unreliable sign; most of the Siriono women have distended stomachs from the habit of overeating when they can. Morning sickness also does not seem to be regarded as a pregnancy sign; at least, I was unable to get any recognition of it or observe any cases of it among the pregnant women whom I interviewed.

In some cases a woman may know that she is pregnant because she has dreamed it. One morning Eantándu told me that his wife was with child.

Since she showed no outward signs of her condition, I asked her how she knew that this was true. She replied that she was certain of it because the night before she had had a dream that she had a very small child inside of her. Upon interviewing her further, however, I found that this dream merely corroborated excellent physiological evidence for her pregnancy, namely, that she had not menstruated for some time.

Once a woman is pregnant, the Siriono have no methods of divining the sex of the child or of forecasting the time of its delivery. When first conceived, the child is believed to be a miniature replica of the infant at the time it is born, and intercourse is thought to stimulate the growth of the infant in the mother's womb. Thus intercourse is desirable throughout pregnancy.

Except for being subject to certain food taboos, the normal life of a woman is little upset during pregnancy. She goes about her regular work until shortly before the time of her delivery. She may not eat coati lest the infant be born with sores and a very long head. The guan, the howler monkey, the macaw, and the toucan are taboo on the grounds that if they are eaten the infant will cry a great deal when it is born. Likewise forbidden is the meat of the armadillo. A violation of this taboo will cause the infant to have great fear like the armadillo, which crosses its arms in its hole when it is caught. Other forbidden foods include the owl monkey, whose meat cannot be eaten lest the infant inherit its tendency not to sleep at night; the anteater, porcupine, and honey bear, lest the infant be born clubfooted; the jaguar, lest the infant be still-born; turtle eggs, lest the mother have a miscarriage or be unable to deliver the infant and die; and the harpy eagle, because it is taboo for all people except the aged.

Some of these food taboos are generalized to the father, but not all of them. The only ones which he usually observes are the restrictions on eating harpy eagle, anteater, and howler monkey, which in a strict sense are not pregnancy taboos, since these animals are never supposed to be eaten by anyone but an old person. However, these food taboos seem to be more carefully observed by the men when their wives are pregnant.

Both the pregnant woman and her husband are also careful not to eat a double ear of corn or a double root of manioc lest twins be born. They

likewise avoid eating twisted or deformed plants of any kind lest this characteristic be transferred to their offspring in the form of clubfeet.

A woman's diet during pregnancy, however, is not much reduced by the above-mentioned food taboos. She is allowed to eat all vegetable foods, fruits, and fish. In addition, she still has a wide selection among meat foods, of which the following are the principal ones: tortoise, turtle, curassow, duck, cormorant, spider monkey, capuchin monkey, squirrel, peccary, tapir, agouti, capybara, paca, alligator, hawk, vulture, and marsh deer. Such animals as the tapir and peccary are especially favored because they are regarded as valiant and industrious, and if their flesh is eaten one's children will grow up to be like them.

Neither abortion nor infanticide is practiced, and miscarriages seem rarely to occur under aboriginal conditions. During my residence in Casarabe, however, where the Indians were living under rather brutal conditions of forced labor, three instances of miscarriage came to my attention. These were caused, according to my native informants, by the fact that the pregnant women were compelled to work beyond their endurance. Under aboriginal conditions, however, miscarriages are generally attributed to the breaking of food taboos, such as the eating of turtle or tortoise eggs. In the case of a miscarriage, the infant and all remains of the birth are thrown away into the bush without ceremony, but the mother and father must undergo a 3-day period of mourning, in which they are scarified on the legs and feathers are put in their hair.

To prevent the occurrence of miscarriage a woman must be careful not to eat the flesh of an animal to which some parallel experience has happened. One day Ndekai, one of my male informants, had several tortoises hanging by lianas from a beam in the house. Early in the morning of the following day it was found that one of these tortoises had "dropped" her eggs on the floor during the night, and that they were broken. The tortoise was cooked and eaten immediately, but Ndekai's wife would have no part of the flesh. She told me that if she partook of any of this tortoise she would have a miscarriage—that she would "drop" her child in the same manner as the tortoise had "dropped" its eggs.

The Siriono also recognize that under extreme conditions of fright miscarriages are more likely

to occur. One interesting instance of this kind, although it was not observed by me, came to my attention while I was living in Tibaera. Sometime in 1938 one of the amphibian planes of Lloyd Aéreo Boliviano, the Bolivian national airline, got lost in a storm between Cochabamba and Trinidad and for lack of gas was forced to land on an uncharted lake in the Siriono country. It so happened that Erésá-eánta (Strong-eyes), his five wives, and their children were camped on this lake at the time, hunting, fishing, and tending a small garden plot which he cultivated there. It was probably the first time that an unacculturated Siriono had ever seen an airplane; in any event, Erésá-eánta and his family were unacquainted with such a phenomenon.

As Erésá-eánta described the event to me, he was returning from the hunt late one afternoon to his house, which was situated near the shores of the lake, when he heard a buzzing sound some distance away. As it became louder he got frightened and hurried on to the house. When he arrived there, he saw a huge *ngidadiša* (harpy eagle, his term for the plane) swooping down on the lake. When it had settled, people got out of its "stomach." He and his family were immediately seized with terrific fright and took to the bush, carrying with them nothing but their hammocks and fire. Upon arriving at a water hole some distance away, they were overcome by darkness and were forced to camp for the night. Sometime during the night, one of his wives who was pregnant—Kiré was her name, and she verified the story—had a miscarriage, "because she had great fear." The remains of this abnormal birth were thrown away into the bush. On the following day Erésá-eánta's wives proceeded to another camp, while he cautiously approached the lake again to pick up some of the supplies left there. Upon arriving, he found that "*ngidadiša*" was still there, and he watched it for some time while hidden in the brush near the shore. Before noon of the same day the "father" of the "*ngidadiša*," i. e., a larger plane, flew over the spot but left immediately. Erésá-eánta remained concealed in the brush. Later in the afternoon a "brother" of the first "*ngidadiša*," i. e., a plane like it, circled overhead and landed near it. This also had people in its "belly." After the people conversed for some time, both of the planes went off together, and he never saw them again. He said that he returned to his

family the same afternoon, but that he did not come back to the lake for a long time afterward. More than 3 years later I had the good fortune to spend considerable time with one of the worried passengers of that plane, Señor Medardo Solares A., who substantially confirmed the events as recounted to me by Erésá-eánta.

CHILDBIRTH

Childbirth normally takes place in the hut and is a public event. Births are well attended by women and children but rarely by the men, who display little interest in such matters. If a birth takes place during the day, even the prospective father will not be present because as soon as a woman begins to feel birth pangs she notifies her husband and he departs for the hunt to seek a name for the child.⁵

The coming of labor pains necessitates certain preparations for the birth. These are usually made by the woman herself. Since parturition takes place in the hammock, she ties a rope (*éčo-séko-sákwa*, "childbirth rope") above it, so as to have something secure to grasp during labor. She also loosens the hard ground under the hammock with a digging stick so that the child will have a soft bed on which to be born. Sometimes she also spreads ashes over the soft earth further to cushion the newborn infant. Having finished these preparations the woman lies down in the hammock where she awaits the birth with grunts and groans to which her tribesmen pay little attention.

Of the eight births which I had the good fortune to witness among the Siriono, four took place during the day and four at night. In the former cases the mothers received no help whatever, either during the preparations for the births or during the births themselves. In the other four cases the husbands assisted to the extent of setting fire to a few dried leaves of motacú palm in order to light up the immediate environs of the hammock, but beyond this they gave no help. At all of the births a crowd of women were present, standing by or sitting in adjoining hammocks, gossiping about what it was like when they had their last child or speculating as to whether the prospective child would be a boy or a girl. Not a move was made by these onlookers to assist the parturient women, except in one case when twins were born.

⁵ See Naming, p. 74.

In all of the births which I witnessed, except that of the twins, the mothers had no difficulty in delivery. The time of labor varied from 1 to 3 hours, but never extended beyond that limit. In all instances the babies were born head first.

To exert force during labor a woman grasps the rope strung above her hammock. The infant, in being born, slides off the outside strings of the hammock on to the soft earth below. Since hammocks are not hung more than a few inches above the floor, the shock to the infant of falling to the ground is not great, yet it is probably sufficient to start it breathing and induce it to show other signs of life. In no case did I see an infant slapped to give it life. All of them started breathing immediately after the shock of birth.

Immediately after the birth the mother gets out of her hammock and kneels on the floor to one side of the infant until the afterbirth is expelled. In all of the cases which I witnessed the afterbirth was expelled in a matter of 10 minutes, but if a woman experiences any difficulty in this matter she is pounded on the back until it does come out.

The proceedings which follow depend to some extent upon whether the birth takes place at night, when the father is present, or during the day, when he is off on the hunt. If the father is present the umbilical cord is cut at once; if not, the mother must await his arrival. The cord is cut by the father with a bamboo knife. After taking a bath he squats on the floor by the infant. The mother then hands him a piece of bamboo, and while she holds the cord away from the placenta, he cuts it about 4 inches from the placental end. After this the mother holds up the cord and the father cuts off a section about 6 inches in length, which is tied to the under side of the hammock to prevent the infant from crying. The remainder of the cord, about 8 inches, is left attached to the infant and is not tied. After all of these proceedings, during which not a word is said, the father returns to his hammock to commence the observance of the couvade. If he has not been present at the birth, the same customs are followed after he returns from the hunt.

Immediately after the afterbirth has been expelled, the mother picks up the newborn infant and begins to scrape the dirt and ashes from its skin and hair with her hands. While thus cleaning the baby she also slightly presses its head from

front to back, and its hips inward, so as to make it *etúra* (beautiful). For a couple of days immediately following childbirth, about every half hour or so, the mother can be observed pressing the infant's head and hips in this fashion to make it beautiful. Having cleaned the baby she gives it a perfunctory bath, from a calabash, after which it is offered suck—usually less than half an hour after birth.

After the baby has been bathed and suckled, the mother begins to clean up the afterbirth which lies under the hammock. No one but she has any contact with this bloody mess. She sits on the ground with the baby in her arms and with one hand scrapes up all evidence of the birth into a pile. This is shoved temporarily into a hole in the ground or placed in a basket, and about 2 weeks later is taken deep into the bush and thrown away. A mother sits on the ground, tending her baby, for about 8 hours following the birth before she again enters her hammock.

For about 3 days following childbirth the Siriono family undergoes a series of observances and rites which we may loosely term the couvade. These rites are designed to protect the life of the infant and to insure its good health. Not only is the infant believed to be extremely delicate during the period immediately following birth, and thus readily subject to disease and death, but it is thought still intimately to be connected with the parents and profoundly to be affected by their activities. Consequently the latter are restricted in various ways. Except for satisfying the calls of nature they do not move outside of the house. They stay close to their hammocks, and are subject to a number of food taboos. Neither jaguar nor coati is eaten lest the infant break out with sores all over its body; paca cannot be eaten or the infant may lose its hair; papaya cannot be eaten lest the infant become a victim of diarrhea. Parents do not suffer much during this period, however, as there is a long list of foods which they can eat: guan, agouti, monkey, tapir, deer, peccary, tortoise, fish, manioc, maize, etc. Some informants told me that maize was taboo during the couvade period—to prevent the infant from having pains in the stomach—but since I never saw this taboo observed it is probably not a functioning one.

More important than the abstinence from certain foods is the carrying out of certain other

practices that must follow the birth of every baby. On the day after the birth both parents are scarified on the upper and lower legs with the eye tooth of a rat or a squirrel. Usually the father is scratched first. No particular relative or person is responsible for performing this operation, though in the case of the mother it is usually done by the husband. Before the husband is scarified he puts on a necklace or two of coati teeth and winds the new baby sling, which has been covered with uruku, around his neck. He stands by his hammock during the operation. The person doing the scarifying squats down and makes long scratches on the outside of the upper legs from the hips to the knees and on the back and outside of the lower legs from the knees to the ankles. As these scratches are relatively superficial, not a great deal of blood flows. Immediately after the operation is finished the legs are washed and covered with uruku.

After the husband has been scarified, he removes the baby sling and the necklaces; the mother then puts these on and undergoes the same operation, usually at the hands of her husband. While the mother is being scarified, the baby is left lying in the hammock or is held by a cowife or sister. According to the Siriono, this practice of scratching the legs has the purpose of getting rid of old blood, which might cause the child to be sick. It might thus be regarded as a purification rite.

Except during the scarification rite the parents stay close to their hammocks on the day following the birth, the father resting and the mother attending the infant. They do little cooking themselves, but are fed by other members of the extended family. There is, however, no taboo on their doing some cooking, and occasionally one sees a mother or father roasting an ear of corn or a root of manioc in the fire at this time.

The most significant thing that happens to the infant on the day following its birth is that it gets its first haircut in the traditional style of the band. This consists in depilating the forehead to a high semicircle. Since this operation is a very painful one, the mother usually pulls out a few hairs at a time and then lets the infant calm down for a half hour or so before continuing the operation. Actually it is a very frustrating experience for the young baby, who struggles its utmost to avoid the pain. Nevertheless, by the end of the second day the infant is without eyebrows, and

the hair on the front part of its head has been pulled out. The removed hair is saved, wrapped in cotton string, and covered with beeswax. It is then made into a necklace, which the mother ties around her neck to promote the growth of the infant's hair.

The second day after the birth of the child is spent in ornamenting the parents with feathers. Both are decorated in exactly the same way. A cowife or potential wife of the father usually performs the task. Again the man is usually decorated first. After the hair is trimmed, red and yellow feathers of the toucan are glued into the hair at the front of the head, tufts of curassow down covered with uruku are glued into the hair over the ears, and tufts of breast down of the harpy eagle (also covered with uruku) are glued into the hair at the back of the head. In addition to these feather ornaments in the hair, both parents are decorated with new cotton string covered with uruku. This is wound around the legs just below the knees, around the arms above the elbows, and around the neck. The face, arms, and legs are then smeared with uruku and the decoration is complete.

These decorations are sometimes applied to other members of the family, especially to a cowife or, in the case of a multiple birth, to either the cowife or sister of the mother who is designated to take immediate care of one of the babies. In such instances the cowives are decorated in the same fashion as the parents. In two of the cases which I observed, boys of about the age of puberty and standing in the *yánde* or potential spouse relationship to the mother also underwent the same ceremonies as the father, doubtless because they, too, had been having intercourse with the mother before and during pregnancy. The relationship between the parents and the child is thus generalized to coparents as well. Children and other members of the family, however, are not decorated, although a feather or two may be added to their hair while the parents are being adorned.

The parents undergo no further rites on the second day after birth, but there still remain the ceremonies that terminate the *couvade*. These usually take place on the third day after birth, although they are sometimes postponed until the fourth, but they do not depend on any particular circumstances, such as the dropping off of the navel cord. In these terminal rites uruku is again

smearred on the members of the family undergoing the couvade. Necklaces made from the base of the quill feathers of a species of hawk are placed around the necks of the father and mother. The mother by this time is also wearing a necklace containing the hair plucked from the infant's head. A few miniature baskets with a very open weave are hastily woven by the mother from a leaf of motacú palm and filled with the ashes of a dying fire. She then takes up the baby and places it for the first time in the new sling, which is dyed bright red with uruku. The father picks up his bow and a couple of arrows, and the family starts off on a trail into the forest. As a rule, but not always, the father marches ahead, carrying his bow and arrows to protect the infant from danger. The mother follows behind, with the baby in the sling, carrying in one hand a basket of ashes, which she slowly scatters along the trail to purify it, and in the other a calabash of water. If there are any other children in the family, or cowives or *yánde*, they may also join the party and scatter ashes along the trail. Usually not a word is said as the party proceeds to its destination. After walking for about 5 minutes the entire group halts. The mother sits down, and her husband brings her a palm leaf from which she begins to construct a carrying basket. The father in the meantime goes in quest of firewood. After firewood has been collected and placed in the basket, the party starts home without ceremony. When they arrive about 100 yards from the hut, the baskets which contained the ashes are hung on to bushes a few feet from the trail. Upon entering the hut the parents kindle a new fire with the wood carried back from the forest. The infant is then given a bath from the calabash of water which the mother took into and brought back from the forest. The period of couvade is then considered to be officially over, and the normal activities of life can be resumed.

MULTIPLE BIRTHS

The Siriono regard multiple births as unnatural. Twins are believed to be caused by the father or the mother having eaten a double ear of corn. In fact, any plant which grows double, such as maize, manioc, or camote, is carefully avoided by adults lest multiple births result. Such plants are always fed to children. Although twins occur occa-

sionally, informants knew of no cases in which more than two children were born at one time.

When twins are born, both are allowed to live. One of them frequently dies, however, because the mother is unable properly to attend both. Although cowives or sisters having no young children usually suckle one of a pair of twins for a short time after birth, there is, except in the case of orphans, a considerable reluctance to take care of anyone else's child for any prolonged period.

A CASE OF TWINS

The following are observations on the birth of a pair of twins at Tibaera on the night of January 17, 1942. Up until the time of the birth, of course, no one had expected a pair of twins—the parturient mother, Eakwantúí (Tapir), least of all. Before the birth she had assured me time and again that she would have but one child.

In the case of this pair of twins, the first signs of birth appeared almost a month and a half before the children were actually born. About 6 a. m. on December 1, 1941, the woman began to feel labor pains and informed her husband. He, following the Siriono custom, picked up his bow and arrows and went out to hunt.⁶ The usual preparations were made for the birth, such as loosening the earth underneath the hammock and hanging up the childbirth rope. After an hour or so, however, labor pains subsided, and the woman went about her usual duties in the house. At noon she smeared some uruku on her face to facilitate the birth, but by the time her husband had returned from the hunt nothing further had happened. He had secured four toucans and two squirrels. These were eaten by him and the families of his in-laws, but his wife did not eat any of these animals as they were taboo to her.

After the first labor pains, life proceeded normally, the prospective father and mother, however, remaining close to the house. On December 4, at about 2 p. m., Eakwantúí again began to feel labor pains. Again her husband picked up his bow and arrows, and preparations were made for the birth. On this day labor pains were considerably stronger than before. Eakwantúí lay in her hammock in great pain, muttering "*šedídi erási*" ("I am child sick"). As her cries got louder, most of the women of the band gathered and sat down in

⁶ The reason for this is to secure a name for the child. See Naming, p. 74.

neighboring hammocks. Children were also present, boys and girls as well as babes in arms. No men were intentionally present, although some lay nearby in their hammocks, paying no attention to the proceedings. After about 10 minutes of waiting for the birth to take place, someone at the other end of the house announced the arrival of a party with manioc brought in from an old garden some distance away. The suffering woman was immediately abandoned; everyone made a rush to see whether he could get some manioc. In a short while the labor pains ceased, and at about 6 p. m. Eakwantú's husband returned from the hunt with a squirrel, which was eaten by his sister.

Nothing further happened, except that the prospective parents had occasional intercourse to hasten the delivery of the child, until December 17, when Eakwantú again began to feel labor pains about 7:30 in the morning. Her husband stretched the childbirth rope over the hammock before going out to hunt. Tatú (Armadillo), the husband's sister, swept the floor under the hammock and loosened the earth with a digging stick. An old woman, not an immediate relative, performed a solo dance at the head of Eakwantú's hammock to facilitate the birth. Again present were most of the women and children of the band. After about an hour the birth pangs subsided for the third time. At nightfall Eakwantú's husband returned with a small tortoise, which was eaten by his brother-in-law.

Between December 17 and January 17 there was no further progress toward labor, but there was considerable talk on the part of the other women, who expected that Eakwantú would die. On the whole, however, they paid little attention to her, although her sister-in-law, Eičazi (Mother-of-Clubfoot) said to me, "*kóse móse mbía máno akendási*" ("People have died in childbirth before"). During this period both Eakwantú and her husband stayed close to camp. He did not go hunting for more than a day at a time, and the only times she left camp were to have intercourse to stimulate the birth of the infant.

Finally, on January 17, at about 3 o'clock in the afternoon, Eakwantú again began to have labor pains. Because of the previous false alarms almost no attention was paid to her at first. Her husband went hunting as usual, although he explained that it was too late in the afternoon to get game. About 5 p. m. the labor

pains began to grow stronger, and Eakwantú's sister-in-law began to rub her stomach a little. She herself was pulling and rubbing her breasts during the pains. This time her husband's sister's husband tied a piece of pole over the hammock with lianas, and she grasped on to this for support while trying to give birth. Receiving very little attention, she continued in pain until about 5:30 p. m., when her husband returned from the hunt with a small turtle. This was immediately prepared and eaten by one of his sisters-in-law. A girl child was finally born about 7 p. m., dropping through the strings of the hammock, and about 3 minutes afterward, a boy. As soon as the girl was born, the father got out of his hammock and assisted Eakwantú by supporting her under the arms. When the boy was born, there was terrific confusion among the women, who crowded so close to the mother that she could hardly breathe, but none made an effort to help her. After the second birth the mother got out of the hammock to expel the afterbirth. Both children were lying in the dirt underneath the hammock, showing few signs of life. The mother appointed Araia, a cowife, to take care of one of the children. When Araia picked up the boy, all the women cried, "*Dézi eráNkwí*" ("penis for the mother," i. e., the boy for the mother), so she put the boy down and took up the girl. The mother, who had expelled the placentas in the meantime, called for a basket. From it she took a small blade of bamboo and handed it to her husband. He first severed the cord of the girl about 2 inches from the placenta and then cut off a piece about 4 inches long, which Araia, the second wife, put on her leg before tying it under her hammock. The cord of the boy was then cut in the same manner. It was now about 8 p. m., and almost everyone who had been observing the birth, retired to his hammock to sleep.

After the rest had left, the mother and Araia remained seated on the ground with the two children. The mother began to scrape up the bloody earth from underneath the hammock with her hands, pushing it into a small hole which her sister-in-law, Tatú (Armadillo), had made for that purpose near the head of the hammock. When all of the blood-stained earth had been placed in the hole, the mother carefully put the two placentas on top. Then both of the women began to shape the children, first straight-

ening their legs, then pushing their hips inward, and finally pressing their heads slightly from front to back—"to make them beautiful," as Araia told me. Both infants were then given a hasty bath from a calabash of water, after which the two women, sitting on the ground, gave the babies suck. When I retired, at about 2 a. m., both women were still attending the infants and sitting in the same position they had assumed after the birth.

On the following morning, January 18, I returned to the hut about 6 a. m. The mother was then holding both of the infants, but when I came into the hut, she passed the female to Araia. The mother had not yet taken a bath; the blood from the birth was smeared all over her legs. Her husband was lying in the hammock, eating maize. The women spent some more time in shaping the limbs and pressing the hips and heads of the infants and then gave them a bath. Eakwantú and Araia next began to eat roasted maize prepared for them by the 8-year-old daughter of the former. After eating the maize, the two women were brought some fruits of the aguái and motacú. They continued to roast and eat until about 2 p. m., when they entered their hammocks for the first time since the birth the night before. At 8 o'clock that evening both women were still fast asleep in their hammocks with the infants upon their breasts. The father had lain in his hammock all day.

About 8 a. m. on January 19 the father took a bath in the river. When he returned, Eakwantú placed two baby slings—newly made and covered with uruku—around his neck, as well as two necklaces of coati teeth. He was then scarified on the legs by Iši, his father's brother. Meanwhile, the two infants were given their first haircut by the mother. During this operation they howled continually. After being scarified, the father's legs were washed and smeared with uruku. He then returned to his hammock and began to eat maize. I asked him what he could eat and what he could not eat at this time, and he gave me the following

list of foods, which he said applied to the women as well:

<i>Foods not taboo</i>	<i>Taboo foods</i>
Peccary.	Coati.
Tapir.	Anteater.
Duck.	Harpy eagle.
Turtle.	Howler monkey.
Cormorant.	Guan.
Spider monkey.	Toucan.
Capuchin monkey.	Paca.
Deer.	Parrot.
Macaw.	Jaguar.
Fish.	Porcupine.
Curassow.	Papaya.
Squirrel.	
Agouti.	
Alligator.	
All vegetable foods.	
All fruits except papaya.	

When the mother finished giving the infants a haircut, the depilated hair was wrapped into two separate cotton balls and hung around the necks of the two women. The mother now gave the boy infant to her husband to hold while she went out to defecate. When she returned, he removed the baby slings and the coati necklaces and put them around her neck. He was then given a haircut by his sister, the hair clippings being thrown in the hole with the afterbirth. Feather ornaments were then put in his hair, in the traditional fashion by his sister. After he had been decorated, he scarified the legs of the mother and of Araia, who was taking care of the female infant. Both of the women had previously bathed: They were then given a haircut, and feather ornaments were glued into their hair. Cotton string covered with uruku was also wound around their arms, legs, and necks. By the time these decorations were complete, the day had almost ended, and after an evening meal of maize all retired to their hammocks.

Early the next morning, January 20, the members of the family smeared uruku on their faces, arms, and legs. The father took off his old wrist guard and put on a new one. Both of the women and the father hung necklaces made of the base of

the quill feathers of the hawk around their necks. The women were also wearing necklaces containing the depilated hair of the infants. Several small, loosely woven baskets were made by the mother, and these were filled with ashes.

At 8 a. m. the party left for the bush on a trail leading out from the east side of the house. The father of the twins and his two wives were accompanied by one of his nephews, who led the party with a basket of ashes which he strewed along the trail. The two women followed behind and also scattered ashes. The mother likewise carried a calabash of water, but she did not sprinkle this along the way. The father brought up the rear of the party, carrying nothing but his bow and two arrows. Not a word was said as the party proceeded along the way.

After walking about 10 minutes, when there were no more ashes left in the baskets, the party made a halt. The mother sat down and placed the two children in her lap. The father left, shortly returning with a green leaf of the motacú palm from which the mother then began to weave a carrying basket. The father and his nephew went off in quest of firewood, soon returning. The firewood was put in the basket, which was placed on the father's back, and the party set out for the house. Just before arriving, however, a small stick was stuck into the ground, and the empty baskets, which had contained the ashes, were hung on it. The party then returned to the hut. Here a new fire was kindled, and the mother gave the twins a bath from the calabash of water which she had been carrying. The father shortly left the house again and brought back a ripe leaf of the motacú palm, from which the mother wove a basket. When this was completed, she placed in it all the remains from the birth which had been lying in the hole in the ground at the head of the hammock, leaving the basket standing under the hammock. She then went about her regular household duties, and the father went out on the hunt. The period of couvade was officially over.

The feather ornaments which are glued into the hair after the birth of a child are worn for about a month afterward. In the case of the above-mentioned twins, the feathers were not cut out of the parents' hair until February 24. The after-birth, moreover, was left standing in the basket underneath the hammock for 16 days before it was

taken by the mother deep into the bush and thrown away.

PATERNITY

Only in one birth which I observed was there any question of the paternity involved or a reluctance on the part of a woman's husband to accept her child as his. Of course, considering the sexual freedom allowed by the Siriono, the true paternity of a child would be difficult to determine, but, as far as the group is concerned, it is only the social role of the father that is important. In the case referred to, one of the wives of Eóko (Tall-one) came into labor early one morning. Eóko left for the hunt before the infant was born but knew that his wife was in labor. She gave birth to a girl about 8 a. m. I was present at the birth and spent the day observing postnatal events, and, like the mother, waiting for Eóko to return and to cut the cord. We waited patiently until about 5 p. m., but Eóko had not yet returned. As a somewhat partial observer at this stage, I became concerned that the infant might die from an infection of the cord and placenta, which had been exposed to the flies the entire day, but upon making the suggestion that the cord should be cut, I was told by the mother and other informants that it was necessary to await the arrival of Eóko. Finally he returned, in company with other hunters, just as the sun was going down. He had shot a few *keN* (capuchin monkeys) which he threw down by the hammock of his first wife, paying no attention, however, to the mother and the newborn infant. In fact, he cast not so much as a glance in their direction.

Meanwhile, the mother took out a piece of bamboo and sat patiently on the ground waiting for Eóko to cut the cord. Instead of so doing, he lay down in his hammock and ordered his first wife to extract the thorns from his hands and feet. This operation took approximately half an hour, by which time it was fairly obvious to all present that Eóko had no intention of cutting the cord. Women began to gather. Seáči, who was Eóko's niece, came up to me and said softly: "You speak to Eóko; tell him to cut the cord." I replied: "No, you speak to him." She was afraid to do so. Then one of Eóko's relatives remarked that Eóko claimed the child was not his, that he had "divorced" this woman some time before. Following this declaration, one of the mother's female relatives came forward and publicly demanded that

Eóko cut the cord. He paid no attention whatsoever to her but continued to lie in his hammock and smoke his pipe. The mother of the infant took no part in the proceedings but continued to sit quietly on the ground with the child. Darkness set in. The mother's female relatives continued to put pressure on Eóko to cut the cord. Finally, after about an hour, he got up from his hammock, called for a calabash of water, and took a hasty bath. He then stooped down, took the bamboo knife from the mother, and severed the cord, thereby recognizing the child as his. Before doing so, however, he emphatically stated that the child was not his and that he was only cutting the cord to prevent the death of the child.

Eóko's reluctance to accept the infant as his was clearly reflected in his behavior during the period of couvade. He acted as if he did not care whether the infant lived or died. He paid no attention whatsoever to the mother, and although he was decorated with feathers like every father of a newborn child, he underwent few of the other observances designed to protect and insure the life and health of the infant. He was not scarified on the legs, for instance, nor did he observe the rules of staying close to the house. He paid no attention to the food taboos and took no part in the rites terminating the couvade. He repeatedly told me that he had "divorced" this woman and that he would have nothing more to do with her. This was borne out by subsequent events.

NAMING

The Indians' kinship with the animal world is clearly reflected in the system of naming. At birth almost everyone receives an animal name. The most common method of securing such a name is for the father to go in quest of an animal as soon as the prospective mother begins to feel the pangs of childbirth. He usually goes in search of a particular animal, a valiant one like a tapir, a jaguar, or a peccary, but if such an animal is not to be found, the child is named for the first animal that the father kills. It so happens that in the cases of childbirth which I witnessed the father never came home empty-handed from such a hunt.

A specific case will best explain the method of naming. A certain woman at Tibaera called Eantázi (Mother-of-Strong-one) felt birth pangs in the early morning of August 28, 1941. Her

husband, Eantádu (Father-of-Strong-one), upon being informed that the infant was soon expected, picked up his bow and arrows and left immediately for the hunt. Before leaving, however, he told me that he was going to look for a *yákwa* (jaguar) after which to name the baby. The infant was born about 10 a. m. while the father was still out on the hunt. He returned about 5 p. m., carrying a young jaguar on his back. After he had cut the cord, I asked him what the name of the child would be, and he replied, "Yákwa," which was the first animal that he had hunted that day.

The above-mentioned method of naming is practiced when the birth takes place during the day. If a child is born at night, when it is impossible for the father to go hunting, other methods are followed. In such cases, the infant may be named after some unusual characteristic that it possesses, such as a clubfoot, or after an animal some characteristic of which it shows a remarkable resemblance to. In the case of the twins whose birth was described above and which took place at night, the female was called Eáta (Many) because more than one child was born; the boy, Eičá (Twisted) because one of his feet was markedly turned inward. In another instance which I observed, an infant was born about 3 o'clock in the morning. Upon arriving belatedly on the scene, I asked the father what the name of the child would be, and he replied, "Yikína" (Owl monkey). When I questioned him as to why this name was given to the infant, he replied that while the birth was taking place a troop of owl monkeys passed by the house and were heard chattering.

Although there are no formal ceremonies of naming, an infant is usually given a name by one of these methods. At Casarabe, however, where the Indians were living under conditions of forced labor and acculturation, the custom of seeking a name for the infant before it was actually born was supplanted by one in which it was named after the period of couvade was over.

Besides the name that one receives at birth and the various names that one acquires by virtue of having borne children, i. e., through teknonymy, the Siriono are extremely fond of bestowing nicknames on people. These are applied to individuals because of some striking physical characteristic that they possess or because of some outstanding event that happened to them. A man who

falls from a tree, for example, may be known henceforth as "Falling-from-a-tree."

Nicknames change frequently. Some of the common ones coined at Tibaera were the following: Erúba-erási (Sick-face), IkáNge (Bones), Konómbi-ačíkwa (Tortoise-rump), Eresaia (Blind), Mbe-erási (Snake-sick), Eidúa-ekwásu (Big-navel), Aífti (Close-at-hand), Etómi (Lazy), EréN-ekída (Fat-vulva), and Mbíku (literally "opossum," but applied to a man who steals other men's women). While I was at Tibaera, the custom of nicknaming also extended to me. One of my nicknames which persisted for some time was Kíkwandúsu (Big-deer), because I was known to be skillful at shooting deer on the pampa. I was also variously called Erésa-erasi (Sick-eyes), Eabóko (Long-hair), and Embúta (Beard). By those Siriono who have had contact with the outside a stranger is invariably called *taita*, the Quechua term for father, old man, or *patrón*.

No sex distinctions are made in the naming of children, and such things as status differences in names, individual names, and taboo names do not exist. Within the band various people may have the same name. At Tibaera, for instance, there were several people by the name of Seáčí (Coati), Embúta (Beard), and Eičá (Clubfoot).

INFANCY

When the period of couvade is over, the infant, who is then regarded as a definite member of the nuclear and extended family, stays almost constantly with his mother until he is about a year old. Most of the duties pertaining to his care fall to her. Whenever the mother is in the house, the infant lies across her lap; whenever she leaves the house, he is placed in the baby sling and carried astride her hip. He is freely offered the breast whenever he is awake, and if he cries, his mother tries her best to pacify him by this method. She grooms him frequently, watching for the appearance of wood ticks, lice, and skin worms; she carefully protects him from the bites of mosquitoes and other harassing insects which cause him no end of discomfort and distress.

During this early period, infants are carefully watched that they do not play with their feces. The Siriono appear to have made the connection between contact with feces and such ailments as hookworm and dysentery. Consequently, whenever the infant defecates, the excreta are immedi-

ately cleaned up by the mother (she generally uses a hard shell of motacú fruit for this purpose), wrapped in a leaf, and stored in a special depository basket. When this basket becomes full, the mother carries it some distance into the forest and empties the contents where the child can have no contact with them.

In spite of the care with which mothers watch their young babies, I frequently observed infants playing with their feces. On one occasion Ačíba-eóko and his family were busily engaged consuming a batch of manioc. His first wife's baby, a boy about 6 months of age, was lying on the ground near the hammock. The baby defecated while the mother was eating, and she did not see him. After lying in the excreta for several minutes, he began to smear them over himself and shortly thereafter he put some of them into his mouth. At this moment the mother observed what he was doing. She grabbed the infant by the arm, put her finger into his mouth, and cleaned out the excreta, saying at the same time, "*abačíkwaia ikwa nde*" ("You are an evil spirit"). Although the baby was badly soiled, he was not bathed, but was wiped with a large leaf. The mother continued to eat without washing her hands.

An infant receives no punishment if he urinates or defecates on his parents. Almost no effort is made by the mother to train an infant in the habits of cleanliness until he can walk, and then they are instilled very gradually. Children who are able to walk, however, soon learn by imitation, and with the assistance of their parents, not to defecate near the hammock. When they are old enough to indicate their needs, the mother gradually leads them farther and farther away from the hammock to urinate and defecate, so that by the time they have reached the age of 3 they have learned not to pollute the house. Until the age of 4 or 5, however, children are still wiped by the mother, who also cleans up the excreta and throws them away. Not until a child has reached the age of 6 does he take care of his defecation needs alone.

Little training is given a child in the matter of urination. Contact with urine is not regarded as harmful, and I frequently observed mothers who did not even move when babies on their laps urinated. Since no clothes are worn by either the mother or the child, the urine soon dries or can readily be washed off. Grown children frequently urinate in the house without censure, and even

adults seldom go more than 10 feet from the house to urinate.

Infants are usually bathed at least once a day. If the band is on the march, infants often receive shower baths from the frequent rains that fall. If the band is settled, the mother usually repairs to the water hole or stream in the late afternoon to bathe both herself and the baby. If not, she usually bathes the baby in the house from a calabash of water. In washing the infant's hands, which she may do more frequently, the mother fills her mouth with water and squirts it on the baby's hands, rubbing them briskly at the same time.

Until a baby is about 6 months of age, he gets no other nourishment than mother's milk. Soon after, however, he may be given a bone to suck on, and his mother begins to supplement his diet with a certain amount of premasticated food. As the infant grows older, he is given more and more premasticated food, so that by the time he is 1 year of age, about 25 percent of his diet consists of foods other than mother's milk. During this time, however, he is never denied the breast if he wants it. In fact, children are rarely, if ever, fully weaned until they are at least 3 years of age, and occasionally one sees a child of 4 or 5 sucking from his mother's breast.

Weaning, like toilet training, is a very gradual process. The rapidity with which it occurs depends largely on how soon another child is expected in the family. If the mother soon becomes pregnant, the infant is discouraged from sucking; if no child is expected, the process may be lengthened considerably. In weaning, the mother usually applies beeswax to her breasts, so that the child receives no reward for his sucking. This method is also employed when the mother is ill and does not want her child to suck. Foul-tasting substances, such as excrement, are never smeared on the breasts to discourage a child from nursing.

Because of the limited time which I spent with the Siriono, I am unable to supply accurate information concerning the age at which such habit patterns as creeping, standing, walking, and talking first appear in children. In all of these respects, however, Siriono infants seem to fall within the normal human range. Parents do little to hasten the maturation process. As habits begin to form, of course, an infant is encouraged to develop them for himself, but if it represents any

strain for him to creep, to stand, or to walk, little attempt is made to force him. If, for instance, an infant is lying on the floor near his mother's hammock and wishes to come to her, he is encouraged to do so by creeping or, if old enough, by walking, but if he starts to cry, which is recognized as a sign that it is too difficult for him, the mother gets up from her hammock and picks him up.

One of the most painful and frustrating experiences that every infant must regularly undergo is that of having his eyebrows and the hair from his forehead depilated. A newborn baby receives his first haircut the day after birth and is subjected to periodic depilations about every 2 weeks thereafter. These are not endured without avoidance and pain. Mothers almost always have to hold infants very forcibly while giving them a haircut, and it is only after a child has reached the age of about 3 years that he resigns himself to this operation without whimpering. Whenever I heard infants howling terrifically, I could be sure they were receiving their semimonthly grooming.

The Siriono are proud parents. They spend a great deal of time in fondling and playing with their children and are delighted to display them to anyone foreign to their camp. I found that one of the best ways to gain the confidence of the Indians was by taking an interest in their children: in bringing them presents, in playing with them, and in curing them of such ailments as hookworm. Their interest in children was also clearly reflected in their conversations with me, for I was bombarded with questions as to how many children I had, where they were living, etc. In order to avoid some explanation of my bachelorhood, which they would not have understood or which would have seemed ridiculous to them, I always told them that I had a wife and several children (I even supplied the names) waiting for me at home, and that as soon as I had obtained the information which my "father" had sent me to gather, I was going to return to my family.

Males are definitely preferred. A pregnant woman always expresses a desire to give birth to a boy. The preference for males, however, is not much reflected in the amount of love or care given an infant. Parents spend as much time fondling a girl as a boy. Even clubfooted children and other deformed infants are shown no lack of partiality in this respect.

CHILDHOOD

The transition from infancy to childhood in Siriono society is a very gradual one. Not only are there no sharp breaks in the process of growing up, but from the time one is a child until one assumes the role of an adult, life is relatively care-free and undisciplined. In fact, this pattern of freedom so carries on throughout adult life that it can be truly said of the Siriono that they are a highly undisciplined people.

In contrast to many primitive societies, where a maternal or paternal relative often assumes the responsibility of formally educating the child, the system of education among the Siriono may best be characterized as informal, random, and haphazard. If there is a general theory of education, it can hardly be more than the necessary one of gradually teaching the child to be as independent as possible of his family, so that by the time he has reached the age of maturity he will be able to shift for himself. Since the amount of knowledge that a child has to absorb to survive in this culturally backward society is small in comparison with what he would have to learn in many other societies, the period of childhood offers more than ample time to instill the patterns of adult behavior without a great deal of formal education.

Until a child can walk or talk, at about the age of 3, he is taught almost everything he knows by his parents and his older siblings, and during the early phases of the education of the child, of course, it is the mother who plays the predominant role. Not only does she feed and care for the child, but she is largely responsible, since the father is way a great deal on the hunt, for teaching him to walk, to talk, and to observe the rules of cleanliness. Young children are, therefore, usually "mothers' boys" or "mothers' girls."

In instilling the habits of prescribed behavior in a child, the principles of reward and punishment are clearly recognized. A mother who is teaching her child to walk, for instance, frequently rewards him, after he has reached his destination, with a bit of wild bee honey or some other tidbit. But if he is violating some taboo, such as eating dirt or a forbidden animal, not only are the rewards withdrawn, but the child may be roughly picked up and set aside to cry by himself for a while. A disobedient child may also be warned that if

he repeats a forbidden act he will be bitten by a snake or carried off by an evil spirit. An unruly child is never beaten, however. At worst, his mother gives him a rough pull or throws some small object at him.

During all of my residence among the Siriono, I observed only one extreme outburst of aggression on the part of a mother against her child. This took place one evening about dusk. Erakúi, a nickname meaning "Pointed-one," had just begun to eat a chunk of broiled peccary meat which she had received from one of her relatives. Her young son, Erámi ("Old-buck"—so-called because he looked like an old man), although he had just eaten, began to complain that he had not had enough to eat. Erakúi paid little attention to him at first, but as he continued to complain, she made a few sharp remarks and finally said to him: "You have already had enough to eat." He replied: "You lie," and made a gesture of grabbing for the meat that she was eating. Suddenly she lost her temper, picked up a spindle lying nearby, and gave the boy a sharp rap on the shoulders. He began to howl and made a dash for the other end of the house to avoid more blows. She followed him a short distance, threw the spindle at him, and then returned to her hammock, where she, too, began to cry. (Mothers almost always cry after they have expressed aggression against their children.) The boy continued to wail at the other end of the house for about 20 minutes after which, since it was getting very dark, he sneaked back and climbed in a hammock with his father. In the morning all had been forgotten.

Children are generally allowed great license in expressing aggression against their parents, who are both patient and long-suffering with them. A young child in a temper tantrum may ordinarily beat his father and his mother as hard as he can, and they will just laugh. When children are neglected or teased by their parents, they often pick up a spindle or stick and strike them with considerable force without being punished. I have even heard fathers encouraging their young sons to strike their mothers. Eantándu told me that such expressions of anger in a child were a sign that he would grow up to be a valiant adult.

Food habits are among the first patterns of behavior that every young child must learn. After weaning, taboo foods are simply withheld from a child, but as he grows older and more omnivorous,

he is threatened with disease and abandonment if he partakes of forbidden foods to which he may be exposed while his parents are not around. The list of foods taboo to him, however, is not long. Among the animals he must never eat is the harpy eagle. This taboo is easy to obey, since this bird is rarely bagged; only two were shot during my residence at Tibaera. The harpy eagle is regarded as the king of the birds by the Siriono, and the eating of its flesh is believed to cause illness (it is never stated what kind) to anyone but an old person. Likewise taboo until one is aged are the anteater, lest one sire or give birth to clubfooted children, and the howler monkey, because it is an "old" animal with a beard and therefore dangerous to eat when one is young. Children are also forbidden the meat of the owl monkey, lest they spend sleepless nights and be restless, and the coati, lest they break out with sores on their bodies. Embryos and the young offspring of animals also cannot be eaten by children, lest they have miscarriages in adulthood.

There are few instances when the above-mentioned food taboos cause a child to suffer from lack of meat. Sometimes, however, hunters return with nothing but a howler monkey or an anteater, and the child is denied a share. On such occasions parents attempt by exchange to secure some edible meat for the child, but in some instances he may be forced to go meat hungry for a day or two. As a last resort, parents sometimes neglect the food taboos in order to satisfy a hungry and whimpering child. I have observed a father offer his crying son anteater meat, for instance, even though it was strictly taboo for the child to eat it. Generally speaking, however, taboo foods are withheld from children, who themselves learn what foods not to eat by the time they have reached the age of 6.

When a child is able to walk and talk, his relations outside of the family begin to broaden. By this time, of course, his education is well underway. Having traveled extensively through jungle and swamp he has already become acquainted with the plants and animals. He knows which ones are good to eat and which ones must be avoided. He has felt the prick of spines. He has experienced the sting of mosquitoes, of scorpions, and of ants. He has seen where animals live and how they are shot. He has watched them being cleaned, gutted, quartered, cooked, and eaten.

He has gone hungry, and he has eaten to excess. He has been sick with malaria, hookworm, and dysentery. He has watched children be born and die. He has seen the aged and sick abandoned. He has observed his parents get drunk, dance, and fight. He has heard of evil spirits, and has been admonished not to venture out of the house at night lest he be carried off by one. In short, although only 3 or 4 years of age, he has already experienced a major part of his natural environment and participated deeply into his culture.

At about the age of 3, although still largely dependent upon his parents, the child begins to stray from the family fire—to play with other children, and to learn those habits which gradually increase his self-reliance and lessen his dependency on the family. His first contacts with people of his own age are generally those with his half brothers, half sisters, and his cousins, who are not only closely related to him genealogically but spatially as well, since the extended family tends to cluster together in the house. A child's first play group, in fact, seldom contains members outside of his extended family. As he grows older, children of the same sex and age from other extended families join the play group, so that at puberty there is usually not more than one play group for each sex in the entire band. Since the local group is small, play groups seldom contain over five or six members.

Since the aim to which every Siriono male aspires is to be an excellent hunter, young boys get an early education, through play, in the art of the chase. Before a boy is 3 months of age his father has made him a miniature bow and arrows which, although he will not be able to use them for several years, are symbolic of his adult role as a hunter. By the time a boy is 3 years of age he is already pulling on some kind of a bow, and with his companions he spends many pleasant hours shooting his weapons at any nonhuman target that strikes his fancy. As he grows older and more skillful with his bow, he begins to select living targets, such as butterflies and insects, and when his marksmanship is perfected he is encouraged to stalk woodpeckers and other birds that light on branches near the house. Consequently, by the time a boy is 8 he has usually bagged some game animal, although only a small bird.

Like young boys, girls, too, through play, get

an early exposure to some of the household tasks which they have to perform when they are adults. As the bow symbolizes the hunting role of the boy, so the spindle symbolizes the spinning role of the girl. Before a girl is 3 years of age her father has made her a miniature spindle with which she practices the art of spinning as she matures.

Strikingly enough, miniature bows and arrows for boys and spindles for girls are the only toys which the Siriono make for their children. There is a conspicuous lack of dolls, animal figures, puzzles, cradles, stilts, balls, string figures, etc., so commonly found in other primitive societies. Occasionally a baby tortoise or the young of some animal is brought in from the forest for a child to play with, but such pets are usually treated so roughly that they die within a few days' time. Moreover, such common amusements for children as games of tag, of hide-and-seek, and racing are unknown in Siriono society. Organized games and contests for children (except wrestling for boys) seem to be entirely lacking.

Besides playing with their bows and arrows, boys amuse themselves in other ways: climbing trees, playing in the water, fishing, learning to swim, chasing one another around camp, and wrestling. They also spend a great deal of time lying in their hammocks, a custom they seem readily to learn from their parents.

Girls play especially at house: making baskets and pots, spinning cotton thread, and twining bark-fiber string. They also frequently assist their mothers in performing such simple household tasks as shelling maize, roasting wild fruits, and carrying water. Young girls also spend a great deal of time grooming each other, depilating the hair from their foreheads and picking out and eating the lice from their heads. In general, by the time they have reached the age of 8, girls have learned to weave baskets, to twine bark-fiber string, to spin cotton thread, and to perform most of the tasks which the society assigns to the adult female.

Within play groups aggression is freely expressed. When boys are playing with their bows and arrows (boys' arrows always have blunt ends, and their bows shoot with little force), accidents sometimes occur, and occasionally one child shoots another intentionally, even though boys are admonished not to point their weapons at any human target. When such accidents or

shootings occur (children are seldom wounded as a result of them), a fight usually breaks out, and the child who has been hit often strikes back at the boy who shot him. Adults generally take no part in these fights (they usually laugh at them), but the loser almost always runs crying to his parents for protection.

Considerable teasing and torturing—such things as pinching of the genitals, poking fingers in the eyes, and scratching—of young children by older children take place. A young child most often protects himself from such attacks with a brand of fire or a digging stick, and if he catches off guard the older child who molested him, he may burn him rather severely or give him a sharp rap on the head. Under such circumstances, older children are not allowed to express counter aggression.

Sibling rivalry does not seem to be intense. If a quarrel breaks out between siblings, parents almost always take the part of the younger child. There seems, in fact, to be a clear recognition by the Siriono that the younger a child the less responsible he is for his acts. As between sisters and brothers, there seems to be a slight preference in the treatment of boys, though this is scarcely noticeable until puberty. Generally speaking, however, boys receive more food and less discipline than girls.

At about the age of 8, a boy begins to accompany his father on the hunt. This is really the beginning of his serious education as a hunter. Until this time most of his hunting has been confined to the immediate environs of the hut. When a boy first starts to accompany his father, he makes only about one excursion per week, but as he gradually becomes hardened to the jungle, his trips away from camp become more frequent and of longer duration. On these expeditions the boy gradually learns when, where, and how to track and stalk game. His father allows him to take easy shots, so as to reinforce his interest in hunting. The boy is given light loads of game to carry in from the jungle, and if he kills an animal of any importance, such as a peccary or coati, he is decorated with feathers like a mature hunter. During all this time, of course, he is also learning to make bows and arrows and to repair those which have been broken on the hunt. Hence, by the time a boy has reached the age of 12, he is already a full-fledged hunter and is able to sup-

ply a household of his own with game. At this age, girls, too, are ready for the responsibilities of adulthood.

PUBERTY RITES

There are no puberty ceremonies for boys. Girls, however, are required to undergo certain rites before they are eligible for intercourse or marriage. Sexual intercourse with a girl who has not undergone these rites is strictly taboo and is believed to be followed automatically by a supernatural sanction of sickness and death.

Unfortunately I never had an opportunity to witness the puberty ceremonies for girls, but after I had been wandering with the band of Aëíba-eóko in September and October, 1941, I was told upon returning to Tibaera that a number of young girls from the band of Eantándu were then in the forest undergoing these rites. I asked Eantándu to take me to where the ceremonies were being held, but he showed a great reluctance to do so, or even to suggest someone who might accompany me. He said that the rites were taboo and, besides, that he did not know where they were being held. I finally persuaded him, however, to suggest another Indian who agreed to accompany me. We set out in quest of the ceremonial party, but after walking about half a day, we met the participants returning.

From what information I could gather from informants—members of the party and the girls themselves—it seems that all young girls are subjected to these rites shortly before they are married. Menstruation is not a prerequisite for undergoing the ceremonies. Just what the prerequisites are I was never able to determine, beyond the fact that the girls must be of about puberty age. The ceremonies do not take place at any particular times or places. They are held whenever there are a few girls whose parents decide that they are of about the right age to be married.

The ceremonies are held near a water hole or stream about a day's journey from the house. Before proceeding to this site, the girls' heads are completely shaved with a bamboo knife. They are accompanied into the forest by their parents, and usually by a few old men and women who are members of the extended family. Some hunters may go along to supply the party with game. Upon arriving at the water hole or stream,

the men construct a raised platform of poles on which the girls are required to sit during the ceremonies, which last for about 2 or 3 days. During this time they are subjected to repeated baths to purify them for intercourse and marriage. They are also told what foods they can and cannot eat during the period following the rites and before marriage. Adult members of the party sing and dance a great deal during the ceremonies. After about 2 or 3 days of such activity, the party returns to the house.

Following these rites in the forest, the girls are not immediately available for intercourse and marriage. They must wait until their hair has again grown to the length of their chins, which takes about a year. During this time they are subjected to the following food taboos. They cannot eat guan, macaw, monkey, curassow, toucan, anteater, coati, harpy eagle, parrot, paca, armadillo, opossum, porcupine, fox, and eggs of any kind. The reasons for not allowing them to eat these foods were never made clear to me except in the case of eggs, which are believed to cause multiple births, and porcupine and anteater, which are believed to cause the birth of clubfooted children. The following foods, however, are not taboo: all vegetable foods, fruits, fish, tortoise, peccary, tapir, deer, agouti, duck, alligator, cormorant, otter, and squirrel.

In addition to being subject to food taboos, adolescent girls, after they have undergone the ceremonies that take place in the forest but before they are eligible for marriage, must do considerable work for the first time in their lives. In many instances they have already been betrothed to potential husbands and therefore spend considerable time preparing themselves for marriage: carrying firewood, twining string, spinning thread, grinding maize, weaving baskets, making pots, and collecting food.

After the rites of puberty have been completed, a girl is no longer regarded as *yukuwáki* (a girl), but is free to have intercourse with her potential husbands and to be married to one of them. In this connection it is interesting to note that there were a number of girls at Tibaera already married or having intercourse who had not yet menstruated. Ngidá (Bow), a boy, for example, was married to Yikína (Owl-monkey) while I was living at Tibaera. She was about 10 years of age and showed no signs of maturity at this time.

Some 2 years later I made a plane flight to Lago Huachi on which some Siriono were camped, among them Ngidá and Yikína. The latter was just beginning to show signs of adolescence after more than 2 years of marriage. In another instance, Kimbai-néti (Little-man), a mature man whose wife had died, married Edabóbo (Armpit), a girl who had not yet reached adolescence. They lived together for some months while I was at Tibaera.

MARRIAGE

The preferred form of marriage is that between a man and his mother's brother's daughter. Marriage between a man and his father's sister's daughter is forbidden. Preferential mating is thus of the asymmetrical cross-cousin type. In actual practice, however, the choice of a mate is not limited to a first cross-cousin. If such a relative is not available for marriage, a second cross-cousin, a first cross-cousin once removed, a classificatory cross-cousin, or a nonrelative may be substituted.

Of the 14 marriages which I analyzed in one of the bands, 6 were between a man and his mother's brother's daughter. The rest were either between second cross-cousins, first cross-cousins once removed, classificatory cross-cousins, or nonrelatives. Although marriage between a man and his father's sister's daughter is forbidden, I did, however, find one instance of a secondary marriage between a man and his father's sister's daughter's daughter, i. e., his first cross-cousin once removed through his father's sister. But marriages of this kind are exceptional (secondary, etc.) rather than the rule, as attested by the fact that almost 50 percent of them were between a man and his mother's brother's daughter. The preference for the latter type of marriage is also clearly reflected in the kinship system. A man calls his mother's brother's daughter "potential spouse," and a woman calls her father's sister's son "potential spouse," while a man calls his father's sister's daughter by the same term that he calls his father's sister, and a woman calls her mother's brother's son by the same term that she calls her brother's son.

Except for the existence of such upsetting factors as polygyny, divorce, death, sororate, levirate, etc., more marriages between preferred cross-cousins would likely occur. Because of one or

another of these factors, however, there seems to be a tendency on the part of the adult men to marry younger second wives who stand in a classificatory, rather than a real cross-cousin relationship to them. Hence, when a young man reaches marriageable age, he may find that his first cross-cousin has already been taken to wife, and he is forced to marry a classificatory cross-cousin instead of his rightful spouse.

In addition to acquiring a wife by cross-cousin marriage, a man may also obtain a first, second, third, or fourth wife by means of the sororate or the levirate both of which are practiced by the Siriono. Of the four plural marriages in one of the bands, three were between a man and two or more sisters. In the fourth, the man had acquired his second wife through the levirate. There is no set rule, however, that a man who marries a woman must also marry her sisters, or that a man must marry the wife of a brother on the occasion of the latter's death. If a man desires these wives, however, he has first claim upon them, and he usually takes advantage of his rights if the woman is young or otherwise desirable.

Generally speaking, there is a strong tendency for brothers to marry sisters. Hence, the condition which earlier evolutionary writers referred to as group marriage is commonly found among the Siriono.

There are no fixed rules of endogamy or exogamy. Bands are more endogamous than exogamous, however, because they rarely have relations with one another and because eligible mates can usually be found within one's own band. When bands do come in contact with one another, exogamous marriages may occur. Sometimes, too, when there are no available real or classificatory cross-cousins or nonrelatives in the band, a man may go in quest of a wife from another band. But instances of this kind are rare for several reasons. In the first place, to locate another band involves great effort; it may mean as many as 8 or 10 days' journey on foot. In the second place, if a man does run across another band, he has no security of finding a wife there, since the men of that band are likely to hoard their women for themselves. In the third place, even though a man has no real wife in his own band, he may possess a number of potential wives and thus not lack for sexual partners. Finally, because of the rule of matrilineal residence, a man will think

twice before abandoning his relatives for a set of in-laws who may be hostile to him.

The age requirements for marriage are very elastic. Infant betrothal is not practiced, but both boys and girls are often espoused before they have reached the age of maturity. Girls, however, must undergo the puberty ceremonies prior to intercourse and marriage. Boys, on the other hand, undergo no rites or tests of any kind before marriage.

The negotiations for marriage are made between the potential spouses themselves, although the parents-in-law usually know beforehand when the marriage is about to take place. The period of courtship is brief. It consists principally in an indulgence in sexual intercourse on the part of the potential mates and in their arrival at a decision to set up house together. If a girl shows reluctance to marry with her potential spouse, she is chided by her mother for her shortcomings and is thus usually forced into the marriage by ridicule.

The marriage itself takes place without ceremony. This is literally true. No exchanges of property occur. The wedding is not even signified by such a simple act as a feast. The marriage rite consists merely in a notification of the parents-in-law of the decision to marry and of a removal of the man's hammock (residence) from its accustomed place in the house (next to that of his parents) to a position next to that of his wife's parents. Consequently matrilocal residence among the Siriono, when marriage is endogamous, consists of nothing more than a shift of locale within the same house. It is true that newlyweds become the butt of sexual jokes and horseplay for several days, but formal occurrences accompanying the union are completely lacking. In other life crises, such as births and deaths, the immediate participants are at least decorated with feathers, but in the case of marriage even this sign of festivity is lacking.

Although matrilocal residence, in endogamous marriages, does not involve a very great spatial removal of a man from his relatives, it does produce a considerable change in his social obligations. After marriage, a man, instead of hunting for his parents, his sisters, and his unmarried brothers, must hunt for his wife's parents, for her sisters, and for her unmarried brothers. While these obligations are reciprocal, a man

usually supplies more game to his in-laws than he receives in return. A man's relations with his own family, however, are not completely disrupted. Besides being related to his in-laws by blood, he continues to reside in the same house as his family. Moreover, his brother may be married to his wife's sister. If not, his brother is at least a potential husband of his own wife with sex rights over her. Hence, brothers usually maintain close bonds after marriage. They continue to hunt together especially, even though their game may be distributed in different ways.

Only in exogamous marriages are a man's relations with his family completely upset. Because of economic factors, resistance to such marriages sometimes arises. While I was at Tibaera, an exogamous marriage occurred which changed existing conditions considerably. A man named Kimbai-ñéti (Little-man) had been previously married to a woman who died. Since there was no available spouse in the band for him to marry, he was without a wife. He continued to reside, however, with his mother-in-law and her other daughter who was married to another man. Kimbai-ñéti was an excellent hunter and brought a great deal of game into the household. When I arrived from the forest in company with the band of Aćíba-eóko, Kimbai-ñéti located a potential spouse in this band. A marriage was arranged. His former mother-in-law, however, tried her best to break up the match, but without success. Kimbai-ñéti left her house and moved in with his new wife and in-laws. Consequently his former mother-in-law was forced to seek other means of support. Before doing so, however, she tried to convince Kimbai-ñéti and his new wife to violate the rule of matrilocal residence and move back to her house, but they would have none of such a plan.

Polygyny is allowed, and sororal polygyny is preferred. Four of the fourteen marriages in the band of Eantándu were plural marriages, and three of these were sororal unions. Only in one instance was a man married to as many as five wives. Three of these were sisters, while the other two were parallel cousins (classificatory sisters) of these. This man was not a chief but a person of considerable maturity and distinction, being about the best hunter in the band. The chief, however, had three wives, two of whom were sisters, while the third he had

inherited from his younger brother who died. One of the chief's other brothers also had two wives who were sisters. In the other polygynous union, the man had inherited his second wife from his mother's brother who had died and left no other brothers to whom she could pass. On the whole, plural marriages tend to occur among the chiefs and the better hunters, who are people of the highest status.

Divorce is relatively easy and is usually caused by adultery or by too frequent intercourse with potential spouses to the neglect of the real spouse. The men always divorce the women, i. e., they "cast them out" or "throw them away." In instances of this kind, the woman usually immediately marries one of her potential spouses with whom she has been having sex relations. Divorces are not common. Women are an asset as long as they can work and bear children, and more than one wife is a mark of status. Thus, although men frequently threaten to divorce their wives so as to keep them in line, they actually rarely ever do so.

The children of divorced couples always remain with the mother. The father changes his residence back to that of his relatives or to that of his new wife. He continues to supply his children with food, however, at least until the mother remarries. Relations between divorced couples are not particularly strained. No stigma attaches to a divorced woman, and she may even occasionally indulge in sex with her former husband.

ADULTHOOD

Adulthood is the time of life when responsibilities are the greatest and status the highest. Among the Siriono this state is signified by marriage and is attained when children are born. Bachelors and spinsters, of whom there are few, have little position in this society, where survival depends on all types of cooperation between husband and wife.

The Siriono are ushered into adulthood prematurely if not abruptly. Younger than in most societies one must take the role of an adult, for younger than in most societies one grows old and dies. The rigors of life being intense, there is a 50-50 chance at least that one's parents will not be alive when one reaches the childbearing age. Consequently boys and girls are frequently

married before they have undergone the physiological changes that accompany adolescence.

While the obligations of adulthood are not extreme (the needs of the society are minimal), the struggle for survival is intense. There is no security of food; there are long and forced marches through spiny jungle and swamp; there are many sleepless nights of wind, rain, and insect pests; there is constant threat of disease and death. In short, the natural environment is harsh, and the techniques which the culture has developed for dealing with it are crude and insecure. Hence a person must be on the alert most of his waking time to procure the bare necessities of life.

While ceremonial life is almost negligible among the Siriono, membership in full adulthood is signified by participation in a bloodletting ceremony and drinking feast which is called *hidai-idákwa*. This is about the only ceremony performed by the Siriono. It was never held while I was living with them, but the marks on the arms of adult men and women were visible evidence that it is occasionally performed.

Hidai-idákwa, or arm piercing, is never carried out until one is adult and has had children. As Eantándu told me, "When a woman has had a child and a man is father of a child, they are ready for *hidai-idákwa*." The principal reason for holding the ceremony is to get rid of old blood—to rejuvenate one. Eantándu said, "The blood is heavy; it must be 'thrown away'." *Hidai-idákwa* also performs the magical function of increasing the supply of food.

Under strictly aboriginal conditions the ceremony is apparently held once a year, when the trees are flowering and there is an abundance of honey. Men and women collect large quantities of honey, and mead is brewed. While the mead is maturing, people participating in the ceremony have their hair cut, and are decorated with feathers and painted with uruku.

The ceremony begins with a drinking feast. The men hold one; the women another. Children are tended by those too young to take part or by those not participating in the ceremony for other reasons. Singing and dancing are a prominent part of the festival. When the participants reach a drunken stage, they pierce each other in the arms with a dorsal spine of the sting ray, and the blood is let into small holes in the ground. Men usually perform the operation both on themselves

and on the women. Each person is punctured about a half dozen times, the men on the lower arms from the wrist to the elbow and the women on the upper arms from the elbow to the shoulder. On the morning following bloodletting, the men depart for the hunt at the break of day, the women following (with baskets of ashes which they spread along the trail) to gather palm cabbage. They return from the forest about noon, and drinking begins again. By the end of the second day the supply of mead has usually been exhausted, and the celebration ends.

A general feast is not held during the ceremony, but people eat at their own fires. Old pots must be thrown away, and cooking is done in new ones. According to informants, the participants are not allowed to eat the following foods for about 3 days after bloodletting: guan, coati, anteater, jaguar, deer, squirrel, otter, monkey, tortoise, fox, armadillo, paca, porcupine, agouti, and palm cabbage. If they violate these food taboos, it is believed that the wounds caused by bloodletting will become infected. Consequently, the game hunted by the participants is distributed to members of the extended family not taking part in the rites. According to Eóko, the diet of the ceremonial party is limited to peccary, tapir, fish, and vegetable foods (except palm cabbage).

No one is obligated to undergo *hidai-idákwa*, but the scars left on the arms by bloodletting are always pointed to with pride. Every child aspires to such a series of tribal marks, for they are visible evidence of maturity.

Besides being a rejuvenation ceremony and a mark of adulthood, *hidai-idákwa* is also believed to insure the supply of food. Kénda told me that during the ceremony the animals all come near the house to see the men gaily attired with feathers and uruku, and to hear them sing. Therefore, when the men go out to hunt after *hidai-idákwa*, they always encounter game.

The adult Siriono spends about half of his waking time wandering around the forest in search of game and food. About one-third of this is spent alone, one-third with fellow hunters, and one-third on expeditions with his family. On the average hunting day he covers approximately 15 miles. Unless he is accompanied by his wife or fellow hunters, he alone carries in the game that he bags. He spends little time in his gardens except at sowing and harvest. His working day

consists largely in hunting, fishing, and gathering.

The adult female, on the other hand, spends much more of her time in the house. When the band or family is not on the march, she devotes a large part of each day to cooking, eating, attending children, quarreling with her neighbors, spinning cotton thread, twining bark-fiber string, weaving mats or baskets, coiling pots or pipes, repairing hammocks, preparing feather ornaments, carrying water, bringing in firewood, or collecting motacú fruits and palm cabbage, which are found in abundance just outside of every hut. She seldom goes any distance into the forest alone or in company with other women. During the rainy season, however, she frequently makes excursions of a day or two with her husband to collect wild fruits, and during the dry season, she may be more or less continually on the march with the entire extended family in quest of food. Like her husband, she does little agricultural work, this being a relatively unimportant activity.

When not wandering around the forest, the adult male is most frequently found in his hammock: resting, eating, smoking, playing with his children, arguing with his wife, cursing the weather, slapping insects, repairing or making arrows. Apart from these activities, he has little recreation. He has few friends but his immediate relatives; he plays no games; he indulges in no sports except occasional wrestling; he does not gamble; he rarely gets drunk, not more than six or eight times a year; he has no hobbies but sex, which he indulges in whenever the spirit moves him; he belongs to no clubs or associations; he has few magical or religious obligations; he sometimes takes part in singing and dancing with his tribesmen on nights of the full moon, but only rarely (about once a year) joins them in drinking and bloodletting to restore his fading youth. All and all, his activities remain on the same monotonous level day after day and year after year, and they are centered largely around the satisfaction of the basic needs of hunger, sex, and avoidance of fatigue and pain.

The life of a woman is equally harsh, drab, and concerned with basic necessities of life. While a woman's position is little inferior to that of a man, the obligation of bringing her children to maturity leaves little time for rest. She enjoys even less respite from labor than her husband. Her recreation is derived principally from the gossip and

quarreling that occur around the fireside, when she is performing the routine household tasks that must be done each day. While she enjoys about the same privileges as her husband, the perennial presence of young children often prevents her from participation in the recreational activities that do exist.

The period of adulthood among the Siriono can hardly be termed a happy one. At best, an adult can look forward to occasional periods of food satiation, sexual satisfaction, and relief from anxiety and pain—a few years during which to bring his children to maturity so that they may carry on. By the time a person is 30 years of age, his powers begin to wane, and as he approaches 40, he is already in the category of old age. Shortly thereafter, he must make way for his grandchildren and face his declining years in dependence and neglect.

OLD AGE

The aged experience an unpleasant time of it in Siriono society. Since status is determined largely by immediate utility to the group, the inability of the aged to compete with the younger members of the society places them somewhat in the category of excess baggage. Having outlived their usefulness, they are relegated to a position of obscurity. Actually the aged are quite a burden. They eat but are unable to hunt, fish, or collect food; they sometimes hoard a young spouse but are unable to beget children; they move at a snail's pace and hinder the mobility of the group.

Where existence depends upon direct utility, however, longevity is not great. The aged and infirm are weeded out shortly after their decrepitude begins to appear. Consequently, the Siriono band rarely contains many members who belong to generations above the parent or below the child. At Tibaera there were only four grandparent-grandchild relationships, and great-grandparents and great-grandchildren did not exist. Although this is a hazardous guess, the average life span of the Siriono—discounting infant mortality—probably falls somewhere between the ages of 35 and 40.

Besides the inability of the aged to perform as well as younger members of the society, certain physical signs of senescence are also recognized. Women who have passed through the menopause are assigned to the category of anility. Deep wrinkles, heavy beards in men, gray hair (occurs

very rarely), stooped shoulders, and a halting gait are regarded as signs of old age.

When a person becomes too ill or infirm to follow the fortunes of the band, he is abandoned to shift for himself. Since this was the fate of a sick Indian whom I knew, the details of her case will best serve to illustrate the treatment accorded the aged in Siriono society. The case in question occurred while I was wandering with the Indians near Yaguarú, Guarayos. The band decided to make a move in the direction of the Rio Blanco. While they were making preparations for the journey, my attention was called to a middle-aged woman who was lying sick in her hammock, too sick to speak. I inquired of the chief what they planned to do with her. He referred me to her husband who told me that she would be left to die because she was too ill to walk and because she was going to die anyway. Departure was scheduled for the following morning. I was on hand to observe the event. The entire band walked out of the camp without so much as a farewell to the dying woman. Even her husband departed without saying good-by. She was left with fire, a calabash of water, her personal belongings, and nothing more. She was too sick to protest.

After the band had left, I set out in company with a number of Indians for the Mission of Yaguarú to cure myself of an eye ailment. On my return about 3 weeks later, I passed by the same spot again. I went into the house, but found no sign of the woman there. I continued my journey down the trail in the direction of Tibaera and soon came upon a hut in which the band had camped the day I parted from them. Just outside of this shelter were the remains (and hammock) of the sick woman. By this time, of course, the ants and vultures had stripped the bones clean. She had tried her utmost to follow the fortunes of the band, but had failed and had experienced the same fate that is accorded all Siriono whose days of utility are over.

DISEASE AND MEDICINE

The principal ailments of which the Siriono are victims are malaria, dysentery, hookworm, and skin diseases. Among the aboriginal groups still surviving in the forest, venereal diseases and tuberculosis are as yet unknown, but under conditions of contact, these maladies have been

largely responsible for the declining population. Such tropical diseases as leprosy and yaws, although common among the whites, are unknown among the Indians.

Knowledge of disease and medicine is not extensive. While a theory of natural causation is recognized with respect to such minor ailments as wounds, burns, and stomach trouble, the majority of maladies, as well as accidents, are thought to be caused by evil spirits called *abačikwaia*. These spirits enter the mouth or nose when a person is sleeping (especially when he is snoring) and settle in the regions where the pain is felt.

In a confused sense there is also a belief that disease is caused by the absence of soul. A person's soul may leave his body while he is dreaming, and if it does much wandering during the night, he is apt to be tired and ill the following day. Informants frequently told me that they were ill because their souls had been "hunting" or "walking" the night before.

The violation of taboos, too, especially food taboos, may be regarded as one of the principal causes of disease. The conditions following a breach of tribal custom are particularly favorable for the entrance into the body of the innumerable evil spirits which are ever present in nature.

Sorcery and witchcraft seem to be almost negligible as causes of disease. I never heard of a single instance in which individuals were accused of employing such methods to injure fellow tribesmen. I was told, however, that threats of sorcery are not unknown as a means of keeping people in line. If a man has an enemy who has been causing him trouble, for instance, he may say to him, "Watch out, or I will take you with me when I die." But such admonitions are rarely used, however effective they may be as a means of deterring people from harming others.

As sickness not infrequently leads to abandonment and death, the slightest provocation is cause for alarm. When ailments appear, the Indians take to their hammocks and rarely leave them until all symptoms of the disease disappear or until death overcomes them. The conditions for cure, however, are very adverse. The patient lies in his hammock on the side of which a smoky fire is kept burning, thus shutting him out from proper air. Moreover, the house is always dark, and since it offers but the flimsiest protection from the weather, the patient is constantly exposed to

rain and cold. On the psychological side, conditions are even worse. The patient is himself filled with an intense anxiety that he is going to die, and this attitude is reinforced by his relatives, who do little or nothing to change it.

The anxieties accompanying illness are, of course, very realistic among the Siriono, for they have almost no methods of effecting a cure. Shamans and medical practitioners are entirely lacking in this society, so that a patient must depend largely on the fortunes of chance in order to recover. Near relatives (always women), such as a mother or a wife, may sometimes chant over a person who is slightly ill, but if he takes a turn for the worse, he may be neglected and thus gradually die from lack of proper care. If the tribe is on the march, he may even be abandoned with no hope of recovery. Doubtless for this reason such a great fear of sickness exists.

One of the principal signs of illness, apart from the pain that accompanies it, is the loss of appetite. When people cannot eat, they are believed to be very ill. If a person does not eat for several days, it is regarded as a sure sign that he will die. For this reason, patients never diet when they are ill. The anxiety based probably on the drive of hunger is sufficiently strong to enable people to eat when food is definitely detrimental to them. In several such instances which I observed, people actually ate themselves to death.

While I was at Casarabe, Téko became sick with dysenterylike infection of the stomach. His illness coincided with the season of maturity of the wild fruit coquino, which is greatly relished by the Siriono. In view of the nature of his illness, I suggested to Téko that he refrain from eating this fruit for several days because of the acid which it contains, often highly irritating to the stomach when eaten in large quantities. But my words had no effect. His relatives collected huge quantities of coquino during the day and brought Téko large baskets of them every night on their return from the forest. In spite of terrific stomach pains and diarrhea, he managed to eat as many as a hundred of these fruits (each one about the size of a large plum) each night, thus irritating his otherwise painful condition. After several days of such a diet, he finally expired one morning, but not without having eaten a full basket of these fruits the night before. Until his death his prognosis had been good, according to

native theory, because he had been able to eat.

In general the *materia medica* is sparse. Uruku, whose curing properties are believed to be very beneficial, is the panacea for all ills. Its powers are believed not only to drive out the evil spirits that cause disease, but to protect one from them as well. Consequently, in sickness or in health, the Indians are rarely seen without a protective covering of uruku. Whenever I myself was ill, uruku was always the first remedy suggested to me by my Indian friends.

Scarification is widely practiced as a relief from pain. The suffering individual is scratched (by himself or by one of his relatives) with an eye tooth of a rat or squirrel in the area where the pain is felt. A small amount of "old blood" is released by this practice, and the scarified area is covered with uruku. Massage, too, is employed to cure minor ailments. In chest complaints, for instance, the back and chest are vigorously rubbed with the hands and kneaded with the fists. Sucking and squeezing are most generally employed to extract pus from festering wounds.

Herbal remedies are almost unknown, except in the treatment of diarrhea. A diarrhetic child is sometimes treated with a decoction made from the bark of a tree which the Siriono call *hidi-ndi-mbi*. Strips of the same bark are also wound around the patient's stomach. Green leaves are bound over open wounds and sores, and strips of bark fiber are bound tightly above infections of the arms and legs to prevent their spread.

The Siriono possess no remedies for snake bite and have no knowledge of setting broken bones. Aching teeth are extracted with the fingers after they become loose. Hairy skin worms, of which the Indians are constant victims, are removed in the following manner. A small amount of the sticky substance from the inside of the pipe stem is extracted with a palm straw and placed in the hole where the worm resides. This irritates the worm which pushes out its head for air. It is then grasped by the head and squeezed until it pops out of the skin.

DEATH AND BURIAL

For a Siriono, death is the culmination of an often short and always bitter struggle for survival. Having wrestled valiantly to live, he wrestles equally valiantly not to die. But the odds are all against him. His environment and

culture are harsh. Having no medicine to prolong his life, he is often consigned to an early grave; having no religion to calm his soul, he frequently dies with fear and bitterness in his heart.

A dying individual, unless he is a child, is given little attention. His near relatives, however, generally assemble to watch him breathe his last. The women mourners sit on the ground around him and weep profusely, but the men show few signs of grief. They usually squat around him and silently smoke their pipes. When a great hunter is dying, however, fellow tribesmen sometimes squat around him and ask him to pass them some of his luck. If, for instance, he was a great hunter of tapir in his day, they may ask him, "Grandfather, where can we find tapir?" He usually answers, "After I die go to (such and such a place) when the sun is rising and you will find tapir." On the sunrise following the disposal of the corpse, the men set out for the spot designated and often find a tapir there.

Among the Siriono a person is not allowed to die in his hammock. Death in a hammock pollutes it, and it will have to be thrown away. Therefore, a dying individual is usually removed from his hammock several hours before death and placed on a mat woven from the heart leaves of motacú palm. Once on such a death mat a person seldom recovers. As he more closely approaches his fate, he is poked in the eyes or pinched in the genitals from time to time to note whether he still shows signs of life; his mouth is frequently opened to determine whether he is still breathing. Only when a person ceases to breathe is he regarded as dead. Once he is dead, however, little attention is paid to his corpse until disposal, which must take place before the next sunset.

Aboriginally the Siriono do not bury their dead. The corpse, extended with arms to the side, is wrapped in two mats of motacú palm and placed on a platform in the house. It is not oriented in any special way. With the deceased are placed his calabashes filled with water, his pipes, and fire. No food is left. Once the corpse is disposed of the house is abandoned; but before leaving, the men shoot arrows in all directions through the house to drive out the evil spirits. The band then moves on to a new location—often several days' journey away.

The period of mourning lasts about 3 days. On the day following the disposal of the corpse,

mourners are scarified (by near relatives) on the upper and lower legs with an eye tooth of a rat or squirrel, and they rub their legs and faces with uruku. On the second day, they are decorated with the feathers of the harpy eagle, the curassow, and the toucan. With this protection they may resume normal life on the third day.

Although grief-stricken parents and widows often do not eat for a day or two following the death of a beloved one, there are no food taboos that apply specifically to the period of mourning. Widows usually cry ceremonially about an hour a day for about 3 days during mourning, but apart from this they undergo no more strenuous rites than other relatives of the deceased.

A widow or widower may remarry within a few days after the death of a spouse. In three deaths which I observed, the widows were married by levirate husbands on the third day after the mortuary rites. In two of these the widows passed to the deceased's oldest brother; in the third, to his parallel cousin (classificatory brother).

While living with the Siriono, I never had an opportunity to observe a funeral under strictly aboriginal conditions. However, I was present at a number of deaths at Tibaera where, according to informants, the mortuary rites were essentially the same as those which take place in the forest, except that the corpse was interred and that the house was not abandoned. Some details of these will best serve to illustrate the treatment of the dead in Siriono society.

Erésá-eóko (Long-eyes), a bearded man of about 40 years of age, died in October 1941. About 10 days before his death, he was stricken with sharp pains in his stomach, accompanied by constant diarrhea. He told me that an *abačikwaia* (evil spirit) was responsible for his illness. During the 10 days that he lay sick, he was attended solely by his wife. Although she gave him no medicines of any kind, she stood by his hammock and hummed chants for an hour or so each day to drive out the evil spirits. This treatment being unsuccessful, she took six of Erésá-eóko's arrows and stuck them into the ground near the head of his hammock—also to drive out the evil spirits. But to no avail, for Erésá-eóko got worse and died shortly thereafter.

In the morning of the day of Erésá-eóko's death, his wife wove two mats of motacú palm. Erésá-eóko was lifted from his hammock while

still alive and placed on one of these mats, where he lay groaning most of the morning. He vomited and defecated frequently. The vomit and excreta were cleaned up by his wife, who wrapped them in leaves and placed them in a special basket hanging nearby. She sat watch over him, opening his eyes and mouth, and pinching his testicles, from time to time, until he finally died at about 2 o'clock in the afternoon.

As soon as it was certain that Erésá-eóko was dead, his corpse was covered with a mat of motacú and, within an hour's time, carried by several of his cousins about a quarter of a mile into the forest for interment. The funeral party consisted of five men—all cousins of the deceased—and the widow. Besides the corpse, they carried with them various possessions of the deceased: his drinking vessels full of water, his pipes, fire, and the basket containing his vomit and excreta of the previous 10 days. Upon arriving at the burial site, they dropped the corpse and these possessions to the ground, and a shallow grave was hastily dug with a digging stick by one of the men. This was lined with green boughs of the motacú palm, and the deceased was rolled into it and buried. His calabashes and pipes were placed on top of the grave, and a small fire was built on either side. The vomit and excreta were then thrown away near the grave, and the party returned to the house. Although the widow wept silently during the proceedings, not a word was said by a single member of the funeral party. After returning to the house, the men went to the river and bathed.

On the day after the burial of Erésá-eóko, his widow was scarified on the upper and lower legs by a cowife. Uruku was then applied to her legs and face, and she was decorated with feathers. She ate nothing for 2 days although she smoked her pipe almost continuously. She cried ceremonially for about an hour each morning for 3 days, after which she moved her hammock next to that of one of the wives of Erésá-eánta, her husband's parallel cousin, to whom she passed under the levirate. Other members of the funeral party were also scarified and decorated with feathers.

While I was living at Tibaera, an infant of about 6 months of age died one morning about 11 o'clock. It had been ill for about 3 days with a stomach ailment, caused, according to the mother, by an

evil spirit. After the death the mother began to wail terrifically (the Siriono always express deep grief over the death of a child) and shortly thereafter emptied her breasts on the ground. About an hour later, she scraped up the wet dirt and put it into the basket where the child's excrement was stored.

The child was interred about 4 o'clock the same afternoon. The parents were the only people who went to the grave besides myself. The mother carried the dead infant wrapped in the baby sling which she had been accustomed to transport it in, and it was buried in a shallow grave lined with green boughs of motacú. A fire was made on both sides of the grave before the parents returned to the house. Both fasted for the rest of the day. The following day they were scarified on the legs and decorated with feathers. The father ate on the day following the burial, but the mother continued her fast until the second day, when she resumed normal life, except for occasional periods of wailing. She continued to empty her breasts, however, to prevent them from drying up.

The disposal of the corpse does not end contact with the dead. After the flesh has rotted, relatives of the deceased are obliged to return and bury the bones. If they are not buried, the soul of the deceased may return as an *abačikwaia* (evil spirit) or a *kurúkwa* (monster) and cause illness and death to the surviving members of the family. The skull, however, is not interred. It is either carried back to the house, where it rests in a special basket near (or under) the hammocks of the immediate relatives of the deceased, or it is abandoned at the site where the bones are buried. In every Siriono hut one finds these skulls, which have been saved as protective family heirlooms; and in wandering around the Siriono country, one not infrequently encounters old skulls that have been thrown away.

The skulls of the ancestors are preserved and carried around for a while as a protection from disease and death. They are also sometimes used in curing. No set rule determines whether a skull will be saved or thrown away. There is, however, a tendency to throw away old skulls as new deaths (and consequently new skulls) appear in the family, and there is also a proneness

to save only the skulls of people greatly loved, such as young children, or of important personages in the family, such as great hunters or chiefs. Many mothers whom I knew in Tibaera were carrying around the skulls of infants who had died not long before. They all told me that they were apt to be sick if they did not follow this custom. In one family which I knew, the skull of a chief called Embutándu (Father-of-Bearded-one), had been carried around by one of his daughters for many years. Whenever any member of her family was ill, this skull was employed to effect a cure. On one occasion I walked into the house and found Nyéka, a son-in-law of the deceased Embutándu, "sick in the chest." He told me that he had an *abačikwaia* (evil spirit) in his chest which was causing him great pain. I asked him how he was going to cure his ailment. He picked up the skull of Embutándu, rubbed it across his chest for a few minutes, and then replied, "Tomorrow, I will not be sick."

When skulls are employed in curing, no magical formulas are recited. Moreover, they are given no special treatment and care apart from being kept in a basket of their own. They are not worshiped, for example, and no offerings are made to them. On occasions, however, I have seen them covered with uruku to make them more effective in curing.

With respect to the cult of the dead, I was told by my companion Silva, who had lived for many years among the Indians at Casarabe and Chiquiguaní, of another custom which he said prevails among the Siriono. He told me that when a man has had a long streak of ill luck in hunting he may repair to the spot where the bones of an ancestor—one who had been a great hunter—are buried and ask him to change his luck and to tell him where to go in quest of game. Upon inquiring of informants as to whether such a custom was practiced, I was answered in the negative by most of them. A few, however, told me that others may have followed such a practice, but that they themselves had never done so. I might add that during all of my residence among the Siriono—and the hunting was frequently bad—I never observed an Indian carry out such a rite.

RELIGION AND MAGIC

RELIGION

Native religion has not reached a high degree of elaboration among the Siriono. One of the reasons for this may be that the Indians are forced to devote most of their time and energy to the immediate struggle for survival. Both shamans and priests are lacking in this unprofessional society, and the confused beliefs and practices that are adhered to with respect to the supernatural world have not been integrated into a complex religious system. As in all societies, however, a distinction between the sacred and profane, the holy and unholy, is clearly drawn by the Siriono. The existence of taboos, of ceremony, of belief in evil spirits, etc., all bear witness to a concern with religious matters.

In this simple society, however, there is no belief in a hierarchy of gods who control the destiny of man. Yási (Moon) is the only supernatural being which the Siriono believe in. As has already been mentioned, mythology imparts considerable power to this culture hero who was responsible for the creation of the world and all that is in it, and attesting to the fact that the moon still plays some role in the affairs of men are such beliefs as that the moon causes thunder and lightning by hurling peccaries and jaguars down to earth and that to sleep under the rays of the moon causes blindness. But the moon can scarcely be regarded as a supernatural being in the usual religious sense. It exerts little or no influence on the affairs of men, and no cult has grown up around it.

The core of Siriono religious belief is centered in the fear of animistic spirits. The universe is thought to be peopled with detached evil spirits called *abačikwaia*, which are responsible for most of the misfortunes that befall the human race. Thus cold south winds, accidents, illnesses, bad luck, deaths, etc., are ascribed to the intervention of *abačikwaia*. These spirits are invisible and formless, little can be done to control them, and they are neither worshiped nor propitiated in any way. They can best be avoided by adhering to the traditional customs of the band.

The Siriono also believe in monsters, of whom they have great fear. These are called *kurúkwa*.

Unlike the *abačikwaia*, which are invisible and formless, the *kurúkwa* are visible and somewhat resemble human beings. But they are large, ugly, black, and hairy. These monsters lurk outside of the house at night, where they await their victims, carry them off into the forest, and strangle them. Sometimes the *kurúkwa* even come into the house and snatch people from their hammocks while they are sleeping. During the day, however, there is little danger of the *kurúkwa*. They have great fear of the bow and arrow. Consequently hunters are never assaulted.

Informants told me that the *kurúkwa* are especially fond of waiting outside of the house on nights of drinking feasts. When the men are drunk, they often go outside of the house to urinate or defecate. The *kurúkwa* await them at the edge of the forest and say, "*Man yen erérékwa héri*" ("What is the name of your chief?"). (The *kurúkwa* are especially fond of killing chiefs.) If the men impart the name of the chief to the *kurúkwa*, they will not be harmed; if not, they may be carried off into the forest and strangled.

The *kurúkwa* are believed to have companions like men. When they are unable to find human victims, they hunt tapir, peccary, and other animals. Kénda, who was one of my best informants at Casarabe, told me that it was dangerous to let my horse run loose at night because a *kurúkwa* might strangle him.

Many informants identified both *abačikwaia* and *kurúkwa* with ghosts of the dead. Some time after the death of Téko, an Indian of Casarabe, Kénda told me that he had become a *kurúkwa* and that he had been seen in the forest by other men. At Casarabe one night an old woman was attacked by a *kurúkwa* while asleep in her hammock—just 3 days after the death of her husband. I fired a pistol to drive the *kurúkwa* away, but for several nights thereafter the woman slept with an arrow by her side so as to be able to resist attack. In another instance a widow at Casarabe remarried without undergoing the usual 3-day period of mourning. She was severely criticized by her tribesmen, who thought that her dead husband would return as a *kurúkwa* to wreak vengeance on the group.

MAGIC

Magic, like religion, is little elaborated among the Siriono. Most magical practice that has not already been described has to do in one way or another with increasing and insuring the supply of food. Hunters hang up the skulls of the animals and the feathers of the birds which they bag on sticks near camp or on posts in the house to influence the same animals to return. They smear their faces with uruku and glue feathers into their hair to make them more attractive to game. They also frequently paint the cotton string of their arrows and wrist bands with uruku to give them magical charm. When they kill a harpy eagle, they rub their bodies and hair with the white downy feathers of the breast to absorb some of the power of this mighty bird. They sing and dance not only for recreation but to promote the supply of game as well. All these and many other magical practices already mentioned appear to have as their principal function a reduction of the anxiety that centers around the satisfaction of hunger.

DREAMS

Dreams are thought to be caused by absence and wandering of the soul. Generally they are believed to presage the future. Hunters who dream about hunting a certain animal believe that this is a sign that they will kill one, and after such a dream they often go on a successful chase. One night Eantádu dreamed that he killed a tapir. Early the following morning, he departed for the hunt and returned late in the afternoon having bagged his prize. He told me that he knew he was going to shoot a tapir because he had dreamed about it. Such experiences are common among the Siriono and strongly reinforce the belief that dreams foretell the future.

If dreams are an unconscious expression of desires, then those of the Siriono clearly reflect their preoccupation with the quest for food. While I was only able to record data on some 50 dreams, more than 25 of these are related directly to the eating of food, the hunting of game, and the collecting of edible products from the forest. An especially common type is one in which a person dreams that a relative who is out hunting, has had luck and is returning to camp with game for him. Enía, for example, had a dream that

Eantádu, who was out on the chase, killed a great many peccaries and was returning to camp with broiled peccary meat for him. Another recurring type of dream is one in which a person himself is out hunting, and kills and eats a great deal of game. Kénda reported a dream in which he was hunting fish in a certain lagoon and shooting huge quantities. His brother was with him, and they roasted and ate fish until they could not move. Dreams also reflect strong desires to eat certain kinds of food. Before the ripening of the coquino fruit, which is greatly relished because of its sugar content, Ai-a dreamed that she was in the forest collecting with her husband and that they encountered coquino trees loaded with ripe fruit, which they ate until they were stuffed.

One of the striking things about food dreams is that they seem to occur just about as often when a person is not hungry as when he is hungry. The food dream of Kénda, for example, was reported the morning following a feast in my house the night before. Hence, it would seem, that such dreams reflect considerable concern about food. Indeed, an intense psychological analysis of the dream life of the Siriono—which I have neither the data nor the skill to make—might support the theory that hunger is the most intense motivating force in the society.

THE SOUL

Ideas about the soul among the Siriono are confused and vague. When questioned about such matters, informants displayed a singular apathy for discussing them. Whether such attitudes spring from a lack of ideas, from a fear of the dead, or from some other reason, I was never able to determine. Some Indians said that the soul resides in the head; others, that it resides in the heart; still others, that they did not know.

Prof. Richard Wegner (1934 b, p. 21) has made the claim that the Siriono have a belief in an afterworld called Mbaerunya, to which the souls of good hunters depart after death and where they while away their time drinking maize beer with a Celestial Grandfather who has many wives. Since this statement has already been emphatically denied by Padre Anselm Schermair (1934, p. 520), I need no more than mention here that I, too, found no evidence to corroborate such a belief in

a hereafter. While notions of an afterlife have crept in where the Indians have had contacts with the whites, these are clearly assignable to Christian influence.

Upon inquiring of informants as to the fate of their souls after death, I was almost always given the answer that they did not know. There seemed, however, to be general agreement that the soul of the deceased may become an *abačikwaia* (evil spirit) or a *kurúkwá* (monster), but this form of survival informants were reluctant to contemplate for their own souls. Out of the confusion of ideas (or lack of them) that exist on the subject, it vaguely appears that the soul of a "good" man, i. e., one who has abided by tribal custom and has

the respect of his countrymen, does not return in the form of an evil spirit or monster to harass his surviving relatives, but that that of a "bad" man, i. e., one who breaks tribal taboos and is disliked by his countrymen, may return in one of these forms to cause sickness and death to the living. That the souls of some of the dead can be relied upon to assist the living is clearly indicated by the aforementioned practice of employing the skulls of some ancestors to cure disease. Informants, however, were never able to supply me with any clear-cut ideas as to what happens to the soul of a "good" person after death. One thing seems clear as regards eschatological belief: there is no afterworld to which the soul departs.

SOME PROBLEMS AND CONCLUSIONS⁷

Siriono society presents any number of important anthropological problems, only a few of which can be mentioned here. Having presented in the foregoing sections a few of the descriptive data about the nature of Siriono society, I should like especially to include a few closing remarks, based on the Siriono data, about the problem of hunger frustration and its relation to culture. In this discussion, I propose ultimately to suggest a number of broad generalizations about the relationship between intense hunger frustration and habits and customs that perhaps can and should be tested in other societies where similar conditions exist. It is beyond the scope of this paper to deal with this matter cross-culturally. Before turning to a consideration of this problem, however, it will be necessary to clarify a number of concepts.

Physiologists and psychologists are now agreed that the human organism is stimulated to behave by what are known as drives. These drives are the motivating states of an organism. They are of two kinds: primary (basic or innate) and secondary (derived or acquired). The primary drives are those which result from the normal biological processes and recur at more or less regular intervals, such as hunger, thirst, sex, fatigue, and pain.⁸ These are found in all human

beings. Secondary drives, on the other hand, are learned drives. They are the motivations which result from particular cultural situations. The secondary drives, of course, are based on the primary drives and are supported by the satisfaction of them. But unlike primary drives they are not universally the same. There are doubtless some secondary drives, like prestige and appetites, that are found in all societies; but their intensities and definitions, at least, vary widely from person to person and from society to society. Among the ancient Romans, for example, food preferences were elaborated to a pronounced degree, while among the Siriono there is almost no expression of these secondary drives. Similarly, among the Indians of the northwest Pacific coast the drive for prestige is intense, while among the neighboring Eskimo this drive is but weakly developed.⁹

While it is axiomatic that every society must reinforce or satisfy the basic drives of man in order to survive, up until recent times culture has been little studied from the point of view of the effect of basic drives upon it. We know from the ethnological literature now available that the drives of man are satisfied by almost as wide a variety of techniques as there are societies existing throughout the world. But ethnologists have focused most of their attention on describing the diverse habits and customs that exist in human societies and have laid little stress on the role played by basic drives in shaping them.

⁷ Because of absence from the United States, lack of good library facilities, and exigencies of publication, I have not had an opportunity to examine all of the literature pertaining to subjects here discussed. While my conclusions are based upon data from but one society, I feel that they might be suggestive for work in others. It is for this reason that I am publishing them now, even though incomplete.

⁸ For a list of primary drives, see Murdock, 1945, pp. 127-128

⁹ For an excellent discussion of secondary drives, see Miller and Dollard, 1941, pp. 54-68.

Malinowski¹⁰ was perhaps the first notable modern anthropologist to pay much heed to the impact of basic drives on culture. He founded his functional system on a series of drives which he called the "basic needs of man." In the sociological field a similar point of view was expressed by Sumner and Keller (1927), who founded their sociological system on a number of universal drives. More recently, largely from the stimulus of psychoanalysis and behavioristic psychology, the study of culture from the point of view of drives (primary and secondary) has received notable expression in the works of—to mention a few—Miller and Dollard (1941), Ford (1945), Whiting (1941), Murdock (1945), Mead (1935), Benedict (1934), Linton (1945), Gorer (1938), and DuBois (1944). None of these, or other workers, however, has dealt with a society in which the drive of hunger is so constantly frustrated as to have become the dominant motivating force in shaping habit and custom. Siriono society seems, clearly, to be such a society.

From the data that have already been presented, especially those relating to food, it would seem, indeed, that the most crucial problem with which the Siriono have to deal is that of securing enough to eat, and the fact that they have been much less successful than most societies in solving their economic problems has doubtless elevated hunger to its preeminent role as a motivating force in the society. The reasons for this are numerous and varied: physiological, environmental, and cultural. An analysis of the data suggests that the following are the principal factors that affect the quest for food and that result in the dominant motivating force of hunger.

I. Physiological factors.

A. Hunger drive.

B. Secondary drives based on hunger drive.¹¹

1. Strong secondary drive or appetite for eating.
2. Satisfaction of prestige based primarily on hunger.
3. Sexual appetites to some extent based on hunger.
4. Aggression expressed in terms of food.
5. Anxieties center largely around satisfaction of hunger.

C. Sex drive mobilized principally through hunger.

1. Family founded on economic basis.
2. Extramarital sex partners seduced through rewards of food.

D. Fatigue drive.

1. Long forced marches in quest of food.
2. Tree climbing to harvest fruits, to retrieve game.
3. Running through swamp and jungle in chase of quarry.
4. Burden carrying.

E. Pain drive.

1. Spines and thorns in body.
2. Accidents (falling from trees, etc.).
3. Attacks by animals (jaguars, snakes, alligators, etc.).
4. Suffering from heat, cold, and rain.

II. Environmental factors.

A. Sparse supply of food.

B. Aleatory factors.¹²

1. High probability of nonsuccess in food quest.

C. Climate unfavorable for preservation and storage of food.

III. Cultural factors.

A. Technological insufficiency.

1. Cumbersome weapons.
2. Lack of tools, traps, etc.
3. Sparse development of agriculture.
4. No methods of preserving and storing food.

A more detailed examination of some of these factors will perhaps better explain why it is that hunger becomes such a potent motivating force in Siriono society. In the first place, the supply of food, while sufficient for survival, is seldom abundant. People actually suffer frequently from food deprivation. As well as being sparse, the food supply is highly insecure; chance factors with respect to the food quest here play a much more significant role in affecting culture and behavior than in most other societies. When a hunter sets out in search of game, there is a high probability that his hunt will be unsuccessful or at least only partially rewarding. True, the forest contains some foods, such as palm cabbage and nuts, that are available and abundant the year around and others, such as certain wild fruits, that are relatively plentiful for about 4 months of the year, but these in themselves are not nutritive enough to sustain life for long

¹⁰ See, for example, Malinowski, 1939.

¹¹ These factors, of course, are also cultural.

¹² These factors, like secondary drives, are also cultural.

periods of time. The society, furthermore, is not equipped with cultural techniques for dealing with its environment so as to offer surety of food supply. Agriculture is but little developed; weapons are cumbersome; tools are almost lacking; and food is neither stored nor preserved in any abundance or for any length of time.

Accompanying these frustrating conditions are others adverse to the satisfaction of the hunger drive, especially the fatiguing and painful aspects of the food quest. The hunter and gatherer must go in search of food at least every other day throughout the year. He must walk long distances, as many as 20 miles a day, in his quest for food. He may be forced to run at top speed through almost impenetrable jungle and swamp to bag a single monkey or coati, and once having bagged his prize he may be forced to climb a tree to retrieve it or the arrow with which he shot it. Game and forest products must always be carried back to camp—sometimes a long distance away. In walking and running through swamp and jungle the naked hunter is exposed to thorns, to spines, and to insect pests; he may fall from a tree (as he frequently does) while harvesting fruits or retrieving game; he is exposed to attacks from jaguars, alligators, and poisonous snakes; he sometimes suffers intensely from heat, cold, and rain. At least 25 percent of the time he returns to camp empty-handed or with insufficient food to completely nourish his family, for which he may be chided by his relatives. In short, while the food quest is differentially rewarding because food for survival is always eventually obtained, it is also always punishing because of the fatigue and pain inevitably associated with hunting, fishing, and collecting food.

Psychologically speaking, these are the conditions that give rise to the preoccupation of the Siriono with food problems, to their affective attitudes toward food, and to their strong secondary drives based on the drive of hunger. The anticipation of the intensely punishing aspects of the food quest—actual food deprivation, possible non-success on the hunt, fatigue, pain, and other forms of punishment—tends to evoke strong anticipatory responses with respect to food. These anticipatory responses—for example, strong food responses to weak hunger stimuli—are, in effect, secondary drives. For purposes of this discussion they may be regarded as appetite and anxiety responses.

Actually psychologists are not yet agreed as to the differences between the secondary drives of appetite and anxiety. A satisfactory definition of and a distinction between these two concepts, though potentially of great value in a systematic analysis of culture and human behavior, has yet to be developed. Recently staff members¹³ at the Institute of Human Relations, Yale University, have proposed the following definitions.

Appetite is a secondary drive whose motivating response is anticipatory and whose original response is a parasympathetic response which occurred just prior to or during the goal act of a given drive.

Anxiety is a secondary drive whose motivating response is anticipatory and whose original response is a sympathetic response which occurred just prior to or during the goal act of a given drive.

In the above definitions, the distinction between appetite and anxiety, although both are anticipatory responses, rests on the assumption that in the case of the former the original response arises in the parasympathetic nervous system, while in the case of the latter it arises in the sympathetic nervous system. This is essentially the position taken by Mowrer (1940), who has dealt at some length with the problem of anxiety. It is doubtful, however, whether this distinction is of much practical utility in the analysis of cultural behavior. In the case of the Siriono data the important fact to consider is that there are strong anticipatory responses toward food. Some of these may be purely appetitive responses, others anxiety responses, and still others a combination of both. These anticipatory responses result, moreover, not from a single factor, but from a combination of all the factors listed above.

Attention should be called to the fact that anticipatory responses toward food in Siriono society may be due, in part at least, to the conflicting factors that affect the quest for food. These conflicting factors seem to be much more pronounced among the Siriono than among most other peoples. On the one hand, a man is strongly motivated (and eventually forced, of course) to go in search of food because of a mounting hunger drive, a desire for prestige, or the need for a sexual partner. On the other hand, he is also strongly motivated to lie in his hammock and to postpone the search for food as long as

¹³ These definitions were developed by Dr. I. Child, Dr. John W. M. Whiting, and Dr. Clellan S. Ford. They have not been published as yet.

possible, because of the painful, fatiguing, and otherwise punishing aspects of the food quest. Before a Siriono picks up his bows and arrows to go on a hunt he doubtless asks himself: "Should I or should I not go?" His stomach stimulates him to go; his relatives tell him to go; he may be motivated to leave by a desire to eat tapir, to seduce a potential wife, to acquire or maintain status, or for any number of other reasons. But when he recalls his last or earlier hunt—an occasion when he came back empty-handed after having tramped all day through jungle and swamp, when he was chided by his relatives for his lack of success or skill, and when he returned with his feet full of spines and thorns and his body covered with wood ticks and insect bites—his ardor to leave is likely to be considerably dampened. Under these conditions he is apt to try to get food first by some other means, and if unsuccessful, even to lie down in his hammock for a while until the hunger drive, or the social pressure to go hunting, becomes unbearable. In any case, if there is food around, he is not likely to expose himself to the rigors of the jungle before it is all consumed, for if he departs under these conditions he is certain to find when he returns that the food has already been eaten by someone else. These conflicting factors are doubtless responsible for much of the behavior toward food.¹⁴

The evidence for strong appetitive and anxiety responses toward food in Siriono society is overwhelming. Hasty preparation of food, lack of complex recipes, absence of standardized routines of eating, stealing off into the forest to eat, wolfing food, overeating, reluctance to share food, lack of food preferences except on a quantitative basis, absence of etiquette and ritual with respect to food, eating when sick, eating when not hungry, excessive quarreling over food, fantasies and dreams about food, insults in terms of food, etc., may all be regarded as direct manifestations of the strength of the secondary drive of eating and of the anxiety that centers around the satisfaction of the hunger drive.

How do such attitudes and behavior toward food arise and develop in the Siriono child? A glance at the data from the life cycle clearly indicates that adult behavior toward food cannot be accounted for on the basis of the experiences of in-

fancy and early childhood. The nursing infant is almost never deprived of food; whenever he cries his mother offers him the breast. He is greatly loved. He is exposed to almost no punishment except what he indirectly suffers from the rigors of the environment, but his parents do everything they can to protect him from cold south winds, from rain, and from insect pests. He can express aggression freely; he is not forced to walk or talk early; weaning is not a traumatic experience. In short, the infant is rarely punished or frustrated. Hence the conditions existing in infancy are not favorable for giving rise to the food anxiety manifested in adulthood.

After weaning, however, conditions change, and somewhat abruptly. However gradual parents try to make the transition from infancy to childhood, it is not always possible. Once the child has ceased to nurse, his food supply becomes uncertain; he begins to feel his first serious hunger pangs. His father may have obtained nothing on the hunt; he may have brought home only varieties of game which are taboo for a child to eat; he may have secured only a small amount of game, not sufficient to completely nourish his family; rain or flood may have prevented him from making an expedition in quest of food. Consequently, after the child is weaned, the response of crying which formerly always resulted in food is no longer always rewarded because there may be no food present at the moment. As the child grows older and more independent of his parents, the periods of actual food deprivation become more frequent and more intense. Younger siblings appear in the family and receive preferential treatment. Accompanying the pangs of hunger are the sufferings of fatigue and pain. The child is no longer carried, but must walk long distances with his parents in quest of food. No longer does he receive protection from cold south winds, from rain, and from insect pests. His feet become filled with spines. He suffers from skin worms, scorpion bites, and lack of sleep.

These are the conditions which provide the learning situation out of which a strong appetite for eating and an intense realistic anxiety about food arise in the Siriono child. These secondary drives develop soon after weaning and rise in intensity as the child grows older and more independent of his parents. By the time a youth reaches the age of 10, he is already manifesting

¹⁴ For an excellent discussion of anxiety and conflict, see Mowrer, 1940, pp. 126-128.

most of the signs of adult behavior toward food. In general, he is aggressive in all matters that pertain to food. He fights and quarrels for his share of food; he manifests a strong reluctance to share food; he wolfs his food; he eats principally at night; during the day he may steal off in the forest to eat; he eats when he is ill or not hungry; he lies about food; he even dreams about food. Indeed, if the Siriono had developed eschatological concepts, the afterworld would probably be a place where food, above all things, would be found in abundance and plenty.

In addition to the above-mentioned individual responses, which we may regard as direct manifestations of hunger frustration and anxiety in Siriono society, it appears that these conditions likewise occasion indirect manifestations by which we may characterize the society as a whole. Culturally, Siriono society exists on a very backward level. Technology is sparse; art is almost absent; social and political organization are relatively simple; there is an unconcern for intellectual and speculative matters. While unquestionably many factors—perhaps hundreds—operate to produce these conditions, yet it seems likely that the preoccupation with food problems—resulting in what we have called hunger anxiety—is one of the most significant ones. From my observations among the Siriono most of the native's time is spent on the quest for food or resting from it; under conditions of this kind, little seems to remain for the pursuit of other activities. While it is dangerous to generalize about such complex problems it does not seem likely that highly elaborated cultures would emerge under conditions similar to those found among the Siriono. Rather, cultures would change slowly and remain on a backward level. This is precisely what the Siriono data indicate.

In Siriono society we note, moreover, what appears to be a dominance of hunger over all other primary drives, except possibly that of fatigue. The Siriono, of course, do not suffer from lack of air or water, so such needs can be largely discounted as strong motivating forces in the society. But the dominance of hunger over sex seems unmistakable. While the drive of sex is seldom frustrated to any great extent, it is mobilized largely through the drive of hunger. The family is founded on an economic basis. Marital partners are secured by providing food and economic security. Extramarital sex partners are acquired

primarily through rewards of food. The preference for fat women over lean women and for food-gathering women over skilled potters or hammock makers suggests that even sexual appetites are based primarily on the drive of hunger. This is clearly observable among the women, who prefer good hunters to all other partners.

Actually, when food is scarce there is little expression of sex. On one expedition which I made into the forest with the Siriono for a period of about 6 weeks, I observed that there was little sexual activity during periods of food deprivation, but that excessive activity followed periods of food satiation. This, coupled with other data, leads to the conclusion that periods of food deprivation are generally accompanied by sexual abstinence while periods of food satiation are followed by sexual excesses. Such behavior seems to indicate the dominance of hunger over sex in Siriono society.

While the problem of the relationship between primary drives needs much further investigation, both in our own and in other societies, it seems as if Siriono society compensates its members for suffering from intense hunger frustration by allowing them great license in the realm of sex. I frequently observed that children were shown greater love when they were suffering from hunger, fatigue, or pain than at other times. With young children love was constantly used as a palliative. So, too, in adulthood sex freedom may compensate for hunger frustration.

Another indirect consequence of hunger frustration is that the strongest secondary drives among the Siriono seem to be those based on the primary drive of hunger. The strong appetite for eating has already been mentioned. Prestige, too, though not a prominent secondary drive, is based primarily on a person's ability as a food getter. Chiefs are always good hunters. Sexual appetites are also founded to some extent on the drive of hunger. Finally, the most aggressive behavior is expressed in terms of and over questions of food, and anxieties seem to center principally around the satisfaction of hunger.

Indeed, if the psychoanalysts are correct in their interpretations of behavior in our own society, the situation found among the Siriono is in many respects reverse. While the strongest secondary drives and anxieties in our own society arise from sex frustration, among the Siriono they may arise

from hunger frustration, and while food often compensates for sex deprivation in our own society, among the Siriono love appears frequently to serve as a compensation for hunger. Hence it would seem unsafe to generalize the findings of psychoanalysis, based on data from our own society, to other societies where drive conditions are not comparable.

The treatment of the sick and the aged in Siriono society appears indirectly to reflect hunger frustration. When a person becomes too old or too sick to hunt, to gather food, to bear children, or otherwise to take an active role in the society, he becomes a liability. If treated indulgently, the sick and aged might prove such a burden as actually to threaten the survival of the group. Consequently, people who are extremely ill or decrepit and whose period of usefulness is over are abandoned to die.

It might seem strange that the Siriono do not follow a similar practice toward deformed infants. Attention has already been called to the fact that some 15 percent of native infants are born with clubfeet. Considering that only about one in five such infants reaches adulthood, marries, and raises a family, it is rather surprising that the Siriono do not kill or abandon them when they are born. But such is not the case. During infancy club-footed children are treated with as much love and respect as normal children. There are doubtless several reasons for this. In the first place, children enjoy a favored status in Siriono society. They are loved to excess and overindulgently treated. While a Siriono thinks nothing of abandoning the aged or sick adult, he would look with horror and disgust at anyone who abandoned or killed a child. In the second place, deformed infants, unlike the dependent aged, do not threaten the food supply of others. They nurse until they are about 3 years of age, and even as young children they eat much less than an aged adult. Finally, there is at least a 20 percent chance that a deformed infant will grow up to be a useful member of society, while it is a certainty that an aged dependent will always remain a burden.

It is probably true that magical practice in Siriono society is likewise largely a function of hunger frustration. While the data from this aspect of culture are sparse, they relate principally to the quest for food. Attention has already been

called to the fact that hunters do not eat the flesh of certain animals that they themselves kill for fear that these animals will not return to be hunted by them. They also hang up the skulls of the animals and the feathers of the birds which they bag for the same reason. They smear themselves and their arrows with uruku, glue feathers into their hair, etc., to attract game. Men let blood to make themselves more valiant hunters; women, to make themselves more valiant collectors. Such magical behavior seems largely to be a reflection of the disparity between the constantly recurring hunger drive and the means of satisfying that drive. Lacking realistic techniques for insuring his food supply, the native resorts to magical practices to secure it. Given the conditions that exist, it is surprising that food and hunting magic have not become even more highly elaborated.

It is significant to note that there appears to be an almost complete lack of sex magic among the Siriono. The reason for this may be that the sex drive, unlike the hunger drive, is seldom frustrated to any great extent. The Indians rarely lack partners. Hence the native feels no need to rely on magical practice to lessen his sexual tensions. In fact, this type of anxiety seems to be remarkably low in Siriono society. Such manifestations as excessive indulgence, continence, or sex dreams and fantasies are rarely encountered except when motivated by a condition of hunger frustration.

The relative cohesiveness of the Siriono kin groups, the nuclear and extended families, as compared with the local group or band, seems also to stem principally from the condition of hunger frustration. While it is true that in most primitive societies kin groups are more closely knit than other social groups, the reasons for this may vary widely from one society to another. The important fact to consider here is that among the Siriono family solidarity seems to spring primarily from a lack of economic security. The supply of food is often not sufficient for distribution outside of the nuclear family and almost never sufficient for distribution outside of the extended family. Under conditions of this kind the local group or band becomes relatively unimportant as a social group. Except for supplying sex and marital partners, it has few functions. Practically all other functions are performed by or within the family. In short, the family embodies almost the totality of culture.

Finally, the personality of the adult Siriono is itself a logical consequence of a lifelong struggle to secure enough to eat. His early education in the family, his later contacts with his fellow tribesmen, and his final exposure to a harsh and rigorous environment all teach him that to survive he must be aggressive, individualistic, and uncooperative. These are the outstanding personality traits of the adult Siriono. The strong dependency relationships formed in infancy and early childhood do not persist. Gradually but prematurely they are displaced by traits of independence, so that when an Indian has reached adulthood he displays an individualism and apathy toward his fellows that is formidable.

The apparent unconcern of one individual for another—even within the family—never ceased to amaze me while I was living with the Siriono. Frequently men would depart for the hunt alone—without so much as a good-by—and remain away from the band for weeks at a time without any concern on the part of their fellow tribesmen or even their wives. On one occasion Ndekai, his wife, and their clubfooted son stayed away from the band for 6 weeks, wandering from one place to another in search of food. When they left they told no one about their plans, and while they were gone, no one showed the least concern about them. After returning from such a long absence, Ndekai was not even greeted by his tribesmen, although they eagerly tried to secure some of the meat he brought back with him. Such experiences indicate that were it not for the fact that the band supplies sex and marital partners, the family could be an independent social group among the Siriono.

Unconcern in one's fellows is manifested on every hand. On one occasion Ekwataia, a cripple who, although he was not married, had made an adjustment to life, went hunting. On his return darkness overcame him about five hundred yards from camp. The night was black as ink, and Ekwataia lost his way. He began to call for help—for someone to bring him fire or to guide him into camp by calls. No one paid heed to his requests, although by this time he was but a few hundred yards from camp. After about half an hour, his cries ceased, and his sister, Seáči, said, "A jaguar probably got him." When Ekwataia returned the following morning, he told me that he had spent the night sitting on the

branch of a tree to avoid being eaten by jaguars. His sister, however, although she manifested a singular unconcern for his survival the night before, complained bitterly that he gave her such a small part of his catch.

Such traits of character as have just been mentioned in no way indicate that the average Siriono is maladjusted and unstable. On the contrary, he seems to have made a relatively stable adjustment to harsh environment and to a culture that offers him little reward. The Siriono data would indicate, however, that man in the raw state of nature—and the Siriono may be regarded as the quintessence of such a man—is anything but cooperative, generous, submissive, or kind.

By way of recapitulation and conclusion a number of generalizations are suggested for further refinement and investigation in other societies where conditions of food insecurity and hunger frustration are comparable to those found among the Siriono.

(1) Such societies will be characterized by a general backwardness of culture. A concern with food problems will so dominate the society that other aspects of its culture will be little developed.

(2) The primary drive of hunger will dominate all other basic drives.

(3) The sex drive will be mobilized principally through the drive of hunger.

(4) The food quest will be painful and fatiguing.

(5) Secondary drives generally will be little elaborated.

(6) The strongest secondary drives will be those based on the primary drive of hunger.

(7) Appetites for eating will be strong.

(8) Anxieties about food will be intense.

(9) Aggression will be expressed largely in terms of food; if not, such aggression will be so severely punished that it will be almost entirely repressed.

(10) Prestige will be gained and status maintained largely by food-getting activities.

(11) Positions of power and authority will be occupied by individuals who are the best providers of food.

(12) Etiquette and ritual with respect to food will either be lacking or it will be elaborated to a pronounced degree.

(13) Fantasies and dreams about food will be common; if not, the subject of food will be so

repressed that food will not appear as a symbol in dreams.

(14) Magical practice will be devoted principally to increasing and insuring the supply of food.

(15) The most rewarding behavior in the society will be that which reinforces the hunger drive.

(16) There will be a tendency to kill, abandon, neglect, or otherwise dispose of the aged, the deformed young, and the extremely ill. If not, such dependents will occupy a favored status in the society.

(17) Kin groups will be more cohesive than all other social groups and will perform a greater number of significant functions than local or other internal social groups.

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SMITHSONIAN INSTITUTION
INSTITUTE OF SOCIAL ANTHROPOLOGY
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QUIROGA

A MEXICAN MUNICIPIO

by

DONALD D. BRAND

assisted by JOSÉ CORONA NÚÑEZ

*Prepared in Cooperation with the United States Department of
State as a Project of the Interdepartmental Committee
on Scientific and Cultural Cooperation*



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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
INSTITUTE OF SOCIAL ANTHROPOLOGY,
Washington 25, D. C., April 29, 1949.

SIR: I have the honor to transmit herewith a manuscript entitled "Quiroga: A Mexican Municipio," by Donald D. Brand, and to recommend that it be published as Publication Number 11 of the Institute of Social Anthropology.

Very respectfully yours,

GEORGE M. FOSTER, *Director.*

DR. ALEXANDER WETMORE,
Secretary of the Smithsonian Institution.

PUBLICATIONS OF THE INSTITUTE OF SOCIAL ANTHROPOLOGY

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- No. 8. Sierra Popoluca Speech, by Mary L. Foster and George M. Foster. iii+45 pp. 1948.
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- No. 10. Nomads of the Long Bow: The Siriono of Eastern Bolivia, by Allan R. Holmberg. iv+104 pp., 7 pls., 4 charts, 1 map. 1950.

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Quiroga: A Mexican Municipio

By DONALD D. BRAND

INTRODUCTION

(MAPS 1, 2)

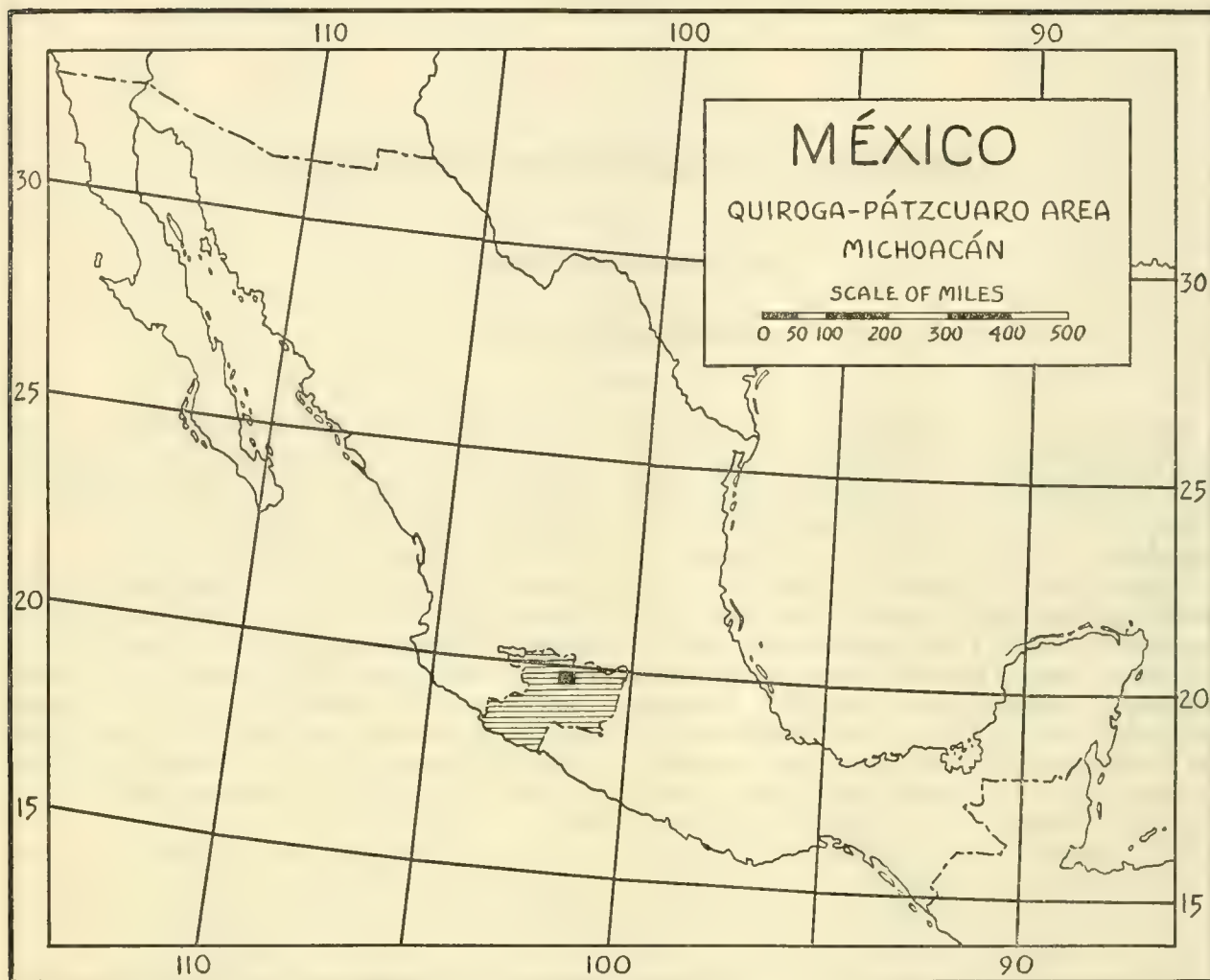
This paper is the outgrowth of two research projects in southwestern Mexico. The Institute of Social Anthropology of the Smithsonian Institution in May of 1944 sent Dr. George M. Foster, ethnologist, and the writer, a cultural geographer, to Mexico. The Mexican office of the Institute of Social Anthropology, in its first 2 years under the directorship of Dr. Foster, concentrated upon a program of campus and field training of graduate students in ethnology and geography. Campus instruction was given as part of the curricula of the Escuela Nacional de Antropología e Historia in Mexico City. The writer taught, among other courses, a seminar in Anthropogeography, with special attention to the methodology of a regional study in Michoacán. This seminar was given in the second term of 1944 (August to December), after which a group of graduate students went out with Foster and the writer to the Pátzcuaro Basin. Here it was decided to divide the party into ethnologists under Foster working Tzintzuntzan and Santa Fe, and the writer, assisted by José Corona Núñez, studying the geography of the area around Quiroga.

This field work continued a project which the writer had begun in 1939. In that year a small group of advanced students at the University of New Mexico was directed in a regional archeogeographical survey of areas mainly within the presumptive fifteenth and early sixteenth century Tarascan realm or region. This work was continued in the summer of 1941 with special attention to northwestern Michoacán (Cojumatlán and Sahuayo) and to a sector of the middle Balsas (San Miguel Totolapan to Santiago Conguripo) where we had surveyed previously. Campus

seminars and library and museum research (concentrated on the natural history, geography, archeology and history of the greater Tarascan region) were carried on sporadically from January of 1939 to January of 1942. In 1944 came the opportunity for the writer to participate in the Mexican work of the Institute of Social Anthropology. This work the director, Dr. Julian Steward, had oriented toward the Tarascan region after conferences with officials of the collaborating Mexican institutions and with Dr. Ralph Beals who had previously carried out ethnologic studies for the University of California in the Tarascan Sierra.

Prior to January of 1945 we had had several contacts with the Quiroga area. In the summers of 1939 and 1941 we passed through and stayed overnight in Quiroga on several occasions. In June of 1944, Dr. Foster, the writer, and two student assistants (Pablo Velásquez and Pedro Carrasco) made a rapid tour of the present Tarascan area from Pátzcuaro and Uruapan to Apatzingán, Tancítaro, and Charapan. In July of the same year the writer renewed his work in the museums, libraries, and archives of Morelia, and spent some time in the Pátzcuaro Basin. On December 27 we commenced field work in Michoacán, and January 2, 1945, we located in Quiroga.

Several reasons led to the selection of the town and municipality of Quiroga as the center for a geographical study. It had been decided earlier to concentrate our studies within the Lake Pátzcuaro Basin, so our field for selection was confined to the four lake municipalities. The town of Quiroga and its dependent ranchos is made up entirely of Spanish-speaking whites,



MAP 1.—Mexico, showing the Quiroga-Pátzcuaro area within Michoacán.

mestizos, and highly acculturated Tarascan Indians. This promised better cooperation from the inhabitants, who would not suspect and resent our intrusion and our questionings so much as would the people of less acculturated Tarascan villages. On the other hand, Quiroga (as Cocupao) had been a pure Tarascan village during much of the Spanish colonial period, and Tarascan was still spoken as the mother tongue by the inhabitants of an entire ward or *barrio* into the nineteenth century. Furthermore, the Tarascan villages of Santa Fe de la Laguna (about $2\frac{1}{4}$ miles distant), San Jerónimo Purenchécuaro, and San Andrés Ziróndaro, had been attached administratively to Quiroga for more than a century. Thus, with headquarters in Quiroga, we had hopes of being accepted by the community, while main-

taining contacts with a considerable gamut of economies and stages of acculturation.

Another reason was the excellent transportation facilities. Quiroga is situated on the main western national highway, No. 4, from Mexico City to Guadalajara, and is at the junction of the branch leading to Pátzcuaro and Tacámbaro. This nodal position in a communications network is not new. Before the coming of the paved highway, and of the earlier railroad along the west side of the lake, Quiroga had been a great mule-train center, with many *fondas* and *mesones*, and with muleteers who went frequently to the *tierra caliente*, the Costa Grande of the Pacific, Guadalajara, Guanajuato, etc. Even earlier, in colonial and prehistoric times, an important road led from Pátzcuaro and Tzintzuntzan through Quiroga to Copándaro,

Cuitzeo, Huango, Puruándiro, and other frequented thermal springs, rich haciendas, great convents of the Franciscans and Augustinians, and frontier posts against the "Chichimec" enemies of the Tarascans.

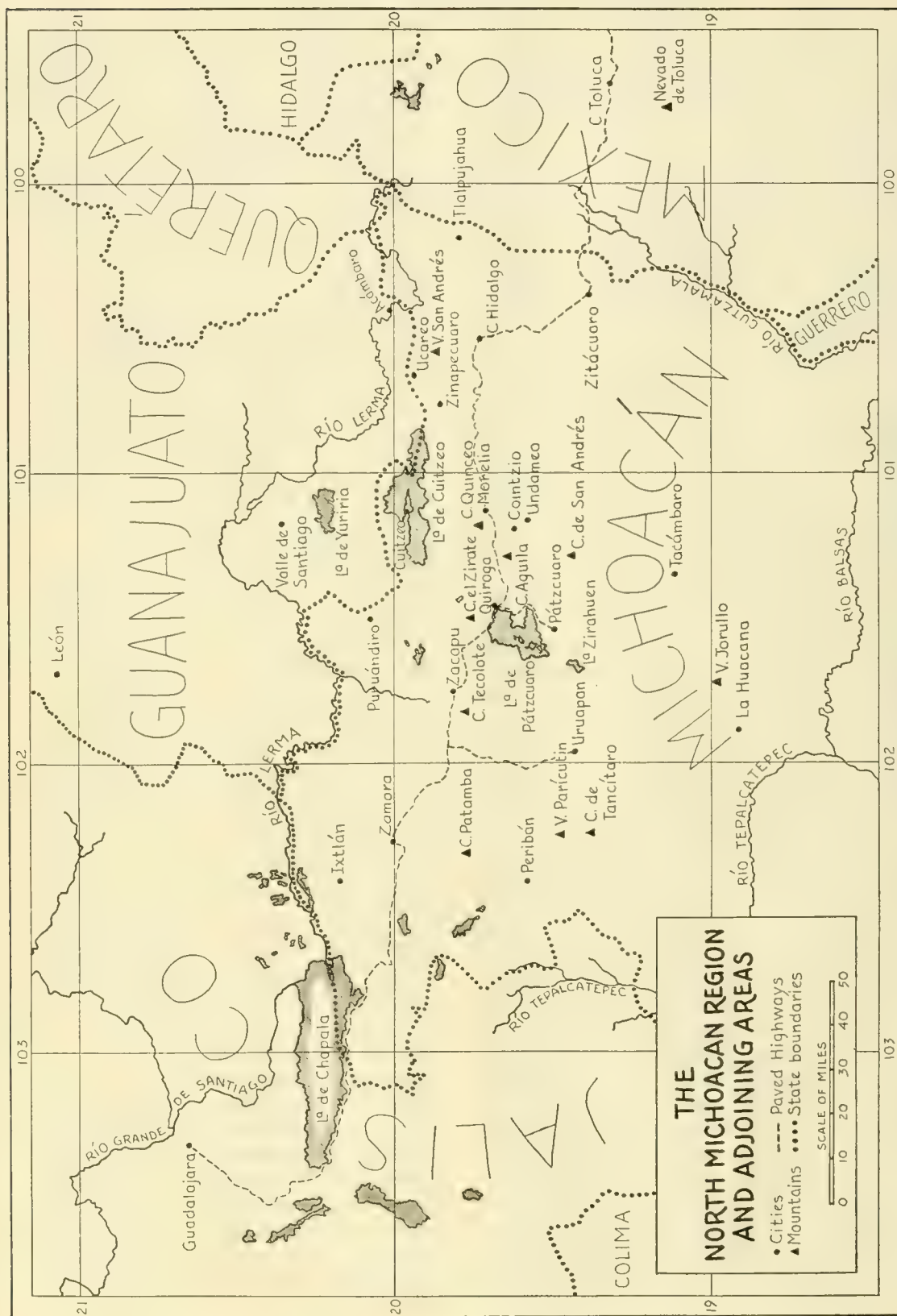
The political and religious history of Quiroga also promised much. It had been a *barrio* of Tzintzuntzan in Tarascan times, and was among the lands held for a time by Cortez himself. The village of Cocupao was one of the earliest congregations in Mexico (dating from the 1530's); and it had a long history of dissension with Santa Fe de la Laguna (the hospital founded by Don Vasco de Quiroga, *oidor* of the second *audiencia*, and later first resident bishop of Michoacán), with Bishop Quiroga himself, and with Juan Infante (usurper *encomendero* of many lake pueblos). Also, the church and mission of San Diego de Cocupao (for 2½ centuries a *visita* of Tzintzuntzan) was one of the oldest Franciscan establishments in Michoacán. Toward the end of the eighteenth century Cocupao became independent of Tzintzuntzan politically, and began to dominate the northern lobe of the Pátzcuaro Basin. Land disputes with Santa Fe, Tzintzuntzan, and the neighboring haciendas of Tecacho and Atzimbo to the north and east, promised interesting sidelights on landholdings and the relationships of *congregación*, *república de Indios*, *hospital*, *hacienda*, etc. During the War for Independence, the Wars of Reform, the French Intervention, and the later revolutionary periods, Quiroga was the scene of many interesting events. Two examples are: the great liberal governor, Melchor Ocampo, and his associates often met in Cocupao prior to the Wars of Reform, and this led to changing the name to Quiroga; and the "Cristero" movement began in the 1870's in the mountain country not far from Quiroga. At one time or another Quiroga has functioned as the seat or *cabecera* of practically every type of State or department subdivision that has existed in Michoacán. All this promised a much richer archival background than for any other community in the basin excepting Pátzcuaro itself. Also, the parish books of births, marriages, and deaths extend back into the eighteenth century, which is quite rare in a town as small as Quiroga. The books of the civil registry extend back to the commencement of such registry in the 1860's, although with many lacunae produced by fire, theft, and destruction by bandits and

revolutionaries. It is no exaggeration to state that among records kept locally, in Morelia, and in Mexico City, Quiroga and its jurisdiction is better documented than any other community of the area excepting Pátzcuaro.

On the geographic side there was much to commend Quiroga. Tzirate, the highest mountain in this part of the state, constitutes the northern limits of the Pátzcuaro Basin and of the municipality of Quiroga. Here we had a transect from lake level and lowland fields to the fir-clad heights of this old extinct volcano. The entire range of local rocks, from Tertiary andesites to possibly the most recent volcanoes and lava flows in the basin, is revealed in the space of a few miles. Also, because of the greatest elevational range in the basin and the accompanying variety in climates, rocks, and land forms, the Quiroga area promised the greatest variety of soils, plants, and animals.

The economy also is quite varied. Agriculture is basic, and embraces growing of vegetables and fruits with irrigation, *temporal* raising of cereals and legumes, pasturing of livestock, and keeping of poultry, swine, and bees. Although near the lake, Quiroga lacks fishing, duck hunting, and weaving of mats from tules. However, the pueblos attached to Quiroga (Santa Fe, Purenchécuaro, and Ziróndaro) stress these forms of economy. No pottery is made in Quiroga, but there is an ancient industry of lacquer work and wood working; and a recently established chair industry has become the most important form of handicraft in the area. The forests of the area are utilized not only for the wood needed in the above-mentioned crafts, but also for charcoal, firewood, turpentine, and a little lumber. There is no mining, but mining is not a part of the economic pattern in the Tarascan lake and mountain country. These, and other minor reasons, prompted us to select the Quiroga area for study.

At the commencement of our work we set up three objectives. One was to make as complete an inventory of the natural resources of the area as possible. Another was to obtain all possible information concerning the history of man in the area. The third objective was to secure a fairly complete picture of the contemporary scene. The ultimate goal was to amass sufficient information to describe a Mexican town and municipality (upon the background of natural environment



MAP 2.—The north Michoacán region and adjoining areas.

and historical development) so that people in other Mexican towns and in foreign lands might know how this community made a living, what the people were like, how they governed themselves, their relationships with the State and Federal Governments, their education, their religion, their recreation, what they ate, from what diseases they suffered, what kinds of houses they lived in, the settlement patterns made by the groupings of the houses, trade and other external contacts, and the dozens of other items that make up the life and actuality of a community or people. A part of the goal was the determination and description of how a pagan Tarascan village had become converted into a Christian Spanish-speaking mestizo town.

To the best of our knowledge, no other such study of a Mexican community exists. There are numerous studies of Mexican communities, but they stress history, or ethnology, or economics, or physical anthropology, or nutrition, or merely relate a visitor's experiences and reactions. Examples are: Redfield's Tepotztlán and Chan Kom, Dickens' Galeana, Storm's Uruapan, Parson's Mitla, and Toussaint's Pátzcuaro. The work on El Valle de Teotihuacán edited by Gamio comes the closest of any study to providing a fairly complete picture of a Mexican community, but various aspects (principally the natural environment, and the political nexus) have been slighted. Our own study is far from perfect, and is purposely deficient along sociologic lines, since Dr. Foster and his group were stressing those aspects in their study of nearby Tzintzuntzan. We have endeavored to stress those elements most commonly neglected or slighted by geographers, anthropologists, and sociologists.

It may serve some useful purpose to outline our field procedure, and narrate some of our experiences. We set up headquarters on January 2, 1945, in a local hotel which once had been the home of the richest citizen of Quiroga. Then we presented our papers and credentials to the *presidente municipal* (president of the township). The first month was devoted mainly to "learning the lay of the land." We walked over every road and public trail in the area, climbed all the higher mountains and hills, collected plant and rock specimens, took elevations and orientations, and took photographs and notes of the various features of the natural landscape. Also, we endeavored

to convince the inhabitants that we were sincere, honest, and harmless individuals who were objectively interested in the area and the life of its inhabitants. After we had made a number of acquaintances and friendships we learned that we had been accused of being such diverse things as Communists, Yankee imperialists, Protestant missionaries, fifth columnists, spies, agrarian engineers planning to seize certain properties, and governmental employees obtaining information in order to increase taxes. All of this was despite the fact that the writer had a United States special passport, and letters of recommendation from Federal officials in Mexico City, the Governor of the State, and the Archbishop of Morelia, and despite the fact that his assistant (Prof. José Corona Núñez) was a native of a town less than 40 miles distant, had been trained in an Augustinian seminary, and had been a well-known and honored teacher in the Michoacán school system. Fortunately, we soon made the acquaintance of Don José Medina Gaona, the local postmaster and a native of Quiroga, who was an educated and traveled gentleman. Through his friendship and aid, and through the genial personality of our assistant, we gradually overcame most of the suspicion and passive opposition which had greeted us. However, we continued to be circumspect in our actions and questions.

We had hoped to use some survey instruments to make a base map of the area, including natural features and field boundaries, but we soon discovered that we could not use the instruments and retain the confidence of the farmers. When we took a general census of the area we purposely omitted all questions concerning names, religion, real-estate holdings, valuations, and similar topics. This did not materially reduce the usefulness of our census, since it is second nature in Mexico (as well as elsewhere) to give consciously inaccurate information on the latter topics even to official census takers and tax officials. The census constituted the core of our cultural study of the area. We personally visited every house and family in Quiroga and its six dependent ranchos at least once, and most of them twice or more times. In the general census we obtained for every house and every family the following information: location (quarter, block, street, number); the front dimensions of the house; nature of road, street, and sidewalk; number of stories, windows, and doors;

material of roof, walls, and windows; form of the roof; surface finish of the front wall; number of rooms and for what they were used; nature of floor; toilet and bath facilities; yards, gardens, orchards, fields; number and kind of all economic and ornamental trees and shrubs; kinds of flowers; number and kind of all domesticated animals, including pets; nature of water supply; materials used for cooking and illumination; wagons, automobiles, sewing machines, and radios; number of families, and number and sex of adults and children within each family; where born; literacy; individuals who had been in the United States; languages spoken; and occupation. In addition to the general census, several special censuses were taken (on the basis of the information in the general census)—both complete and sampling. We attempted to revisit and obtain specific detailed information from all of the gainfully employed; e. g., the bakers, *arrieros*, carpenters, painters, butchers, shoemakers, etc. Also, special censuses were made of the schools, mills, soap and candle factories, tanneries, brick and tile kilns, etc. Sampling censuses were taken of kitchen equipment, sleeping accommodations, foods, consumption of maize, etc.

While carrying out the various censuses, we periodically revisited the entire area in order to check on seasonal developments in the vegetation, agriculture, forest exploitation, etc. At the end of our first field period, January through June of 1945, we had accomplished about two-thirds of our program. Because of academic commitments we were forced to return to Mexico City for the summer and fall, but we returned to complete our work in a short session from the middle of December 1945, to the middle of February 1946. Unfortunately, the hiatus from July to November excluded a personal check on the seasonal changes of an entire year, but we were able to fill in most of the desired information with data given us by a number of the more observing citizens of the area. In our second field session, in addition to the writer and Corona Núñez, another of our former students from the Escuela Nacional de Antropología e Historia assisted us in all phases of our work. This was Prof. Pablo Velásquez Gallardo, a Tarascan native of Charapan, former assistant to the linguist Swadesh and the zoologist Hall, and former teacher in the Michoacán school system. Velásquez was especially helpful in

ascertaining Tarascan names for various items, and in interpreting various indigenous elements in the culture.

Besides filling in the gaps in our previously acquired data, we spent much of our second session in visiting the ranchos and in abstracting the various local records. The municipal tax rolls for the past 40 years were examined to get an idea of sizes of land holdings, declared valuations, changes in valuations and ownership, methods of land description, etc. A few private titles from the eighteenth century were abstracted; and the title of the *congregación* (dating back to 1534), with later confirmations and changes, was copied in its entirety. In the Agrarian Office in Morelia we copied everything available on the *Comunidad de Indígenas de Quiroga*, including the various litigations with Santa Fe, Atzimbo, and Tzintzuntzan—which included much information on landholdings and boundaries. Also, we abstracted the information concerning the *ejido* of Quiroga. All records available in the municipal palace were examined, and most of them were abstracted. From the treasurer's office we obtained data on all the current imposts, sources of income, and expenditures. The incidence and nature of crimes, and also records of transfer of properties, were obtained in the office of the *juzgado menor*. The secretary's office provided us with broken records covering the history of municipal administration during the past 80 years, including such varied items as the elected officers, changes in street nomenclature and house numbering, installation and upkeep of illumination, market fees, registry of brands, bandit raids, records of the municipal slaughterhouse, water supply, etc. In the *registro civil* we abstracted records covering births, marriages, and deaths from the 1860's through 1945. These records afforded us interesting information as to birth rates, death rates, causes of death, family and baptismal names, longevity, population movement, age at time of marriage and of first child, proportion of males to females, etc. Similar records in the Quiroga parish house, as kept by the various curates, were even more valuable since they were more complete, and extended back into the Spanish colonial period when different books were kept for the various races and castes. One interesting disclosure was that Quiroga, like hundreds of other Mexican com-

munities, once had a large Negro and mulatto population which ultimately became completely absorbed into the mestizo population. During the previous summer, while in Mexico City, we copied the entire detailed 1940 census returns for Quiroga and its ranchos. These records included name, age, religion, and marital status for every individual, which information we had not acquired in our census. Since the Federal 1940 census gave the domicile of each family, we were able to trace various local movements in population by comparison with our 1945 census.

Other items investigated were the local archeology (surface collections were made, some articles were acquired by gift and purchase, and one excavation was carried out), genealogies of several of the older and more important families, the various local cults and special days of the Roman Catholic religion, the church bells and the bell-ringing schedule, literature read and postal movements, local status of *sinarquismo* (which was quite important), political and economic feuds among various groups and parts of town, the electoral system and gerrymandering of the voting districts, the various forms of diversion and recreation, incidence of various popular brands of drinks and cigarettes, important personages born in the area, etc., etc. It is of interest to note that Quiroga has produced eminent physicians, one bishop, poets, merchants, and State and Federal officials. Probably the best known is Dr. Nicolás León—one of Mexico's greatest anthropologists and bibliographers. In February of 1946 the Smithsonian Institution and the Instituto Nacional de Antropología e Historia joined in erecting a bronze commemorative plaque on the house in which León was born.

The data acquired during nearly 9 months in Quiroga, and many months of research in Pátzcuaro, Morelia, Mexico City, and libraries and museums in the United States, has slowly been digested and reduced to written report form. Prof. Corona Núñez, during what little leisure time he could find while serving as chief of the archeologic district of Nayarit, has prepared a chapter on archeology, and is translating the entire report for a Spanish edition. The writer, in the hours available after discharging his duties as professor of anthropogeography and head of the Department of Anthropology at the University of New Mexico (until June of 1947)

and as professor of geography at the University of Michigan (June 1947–January 1949), has organized the remainder of the report. (It is planned to present the report in three parts.) The scheme of organization is:

Part I. The physical setting

Tectonics and landforms.
Rocks, minerals, and soils.
Climate and hydrography.
Vegetation and flora.
Fauna.

Part II. Historical development

The archeological record.
The colonial period.
The early independence period 1820–62.
The Middle Period 1863–1910.
The "Revolution" 1911–46.

Part III. Modern Quiroga

Land settlement.
The people.
Names and ethnic origins.
Government.
Economy.
Life in Quiroga.

The entire report, which consists of more than 1,200 pages of typescript, has been written. The monograph which follows this Introduction embodies the third part of our report on Quiroga. Owing to limitation of appropriations, it is probable that the other two parts of the English edition of this report will be published through a non-governmental medium. This monograph lacks the bibliographic essays, history of research in the Pátzcuaro area, and maps which are incorporated with the other portions of the report.

It is hoped that the completed report, with its history of research, bibliographies, and outline of items covered and research procedures followed, will be of help to others planning a comparable study in some other Mexican *municipio*. This report cannot claim to represent a typical Mexican *municipio* until we have similar studies of dozens of other communities scattered over the country, which will enable us to establish norms. At best Quiroga can be typical only of the middle-sized *municipios* of the "Volcanic Axis" portion of the Mexican plateau. Actually, we did not study all of the *municipio* of Quiroga. This municipality is composed of the mestizo *villa* of Quiroga and its six dependent ranchos, and of three Tarascan pueblos with no dependencies. The two divisions

form two distinct ethnic and economic areas. Since accurate work can be done only leisurely and on foot, lack of time prohibited our covering the three Tarascan lake villages. The lack of complete coverage does not affect the validity of our studies, since the normal *municipio* does not include such divergent elements. Actually, the boundary between the lands of the Villa de Quiroga and of the Pueblo de Santa Fe is locally as important as the limits between the *municipios* of Quiroga and Erongarícuaro or Tzintzuntzan.

One other hope we have for this report: that it may help the inhabitants of the area involved. We have incorporated a number of practical suggestions which occurred to us while living in Quiroga. These vary all the way from means for reducing denudation and erosion, and suggested new species and strains of plants and animals, to methods for assuring a better water supply.

In conclusion of this Introduction, there are many acknowledgments that should be made. Nearly all of the inhabitants of the Quiroga area aided us in one way or another. However, certain people were of outstanding help to us. Among these should be mentioned our postmaster friend Don "Pepe" Medina, who was never too busy to help us in any and all matters; the various municipal officials, especially the two *presidentes*, Heliodoro Anita and José Encarnación Medina, the secretary of the *registro civil*, Rafael Huape, the treasurer, Justo Campuzano, the municipal secretary Alberto Tovar, and the secretary of the *juzgado menor*, Carlos Sánchez; Father José Jesús Olivares (curate since 1936); the recent past presidents, Indalecio Chagolla, Amador Peña, and Onésimo Chagolla; the director of the Quiroga school, Prof. Andrés Natividad Ríos, and the various teachers; the collector of taxes, Antonio Castellanos; many merchants, especially Diego Fuentes Ayala and sons, Manuel Torres, Agustín Ponce, Manuel and Salvador Barriga, Roberto Barriga and sons, Ausencio Pantoja, Pablo Herrera, Ezequiel Medina, Ramón Fuentes, and Manuel Arias; the one resident physician, Dr. Arturo Rascón; Doña Josefina Domínguez, niece of Dr. Nicolás León; and last but not least, our good provider of meals Doña Julia Rivera.

Many others, chiefly officials and scholars in Pátzcuaro, Morelia, and Mexico City, were of great help in providing introductions, making available books, records, maps, and archival material, and in identifying various items of our collections of plants, animals, rocks, and soils. There should be mentioned especially Lic. Alfonso Caso (one time director of the Instituto Nacional de Antropología e Historia and now a cabinet member), Ing. Ignacio Marquina (present director of the Instituto Nacional de Antropología e Historia), Dr. Daniel F. Rubín de la Borbolla (the then director of Escuela Nacional de Antropología e Historia), Mr. Eduardo Noguera (then director of the Museo Nacional), and many other members of the Instituto Nacional de Antropología e Historia who were most helpful with letters of introduction, advice, loans of books and maps, etc. The scientists who aided us in laboratory, museum, and the field have been mentioned specifically in the various sections of the report. Others in Mexico City to whom we owe our deepest thanks include Ing. Alfonso González Gallardo, under secretary of agriculture; Dr. Josué Sáenz, director of the Dirección General de Estadística, who made available to us the 1940 census of Quiroga; Dr. Isaac Ochoterena, director of the Instituto de Biología, and the librarian of the *instituto* Mr. C. Vega; and Ing. Teodoro Flores, director of the Instituto de Geología, and the librarian of the *instituto*, Mr. Martínez. In Morelia we received many courtesies from the Governor of Michoacán and his secretary of government, from his eminence the Archbishop of Morelia and his secretary, from Ing. Jesús Medina Mayorga, president of the Com. Agraria Mixta and delegate of the Depto. Agrario, and from our good friend Lic. Antonio Arriaga Ochoa, director of the Museo Michoacano. The director of the Estación Limnológica de Pátzcuaro, Mr. José Zorilla, made available to us the museum and publications of the station. There are many others who helped us in numerous ways, some of them as importantly as a number of those mentioned by name above, but the list would be entirely too long should we attempt to name them here.

December 1948.

LAND SETTLEMENT

HISTORICAL BACKGROUND

In order to understand the development of the land settlement pattern and of the system of land holdings, it is necessary to review the legendary and colonial history of occupation in the Pátzcuaro Basin together with a discussion of place names and their changes. The principal source for legendary history and pre-Spanish place names is the *Relación de Michoacán*, presumably written by a Franciscan friar between 1538 and 1541. Some time in the twelfth century a group of seminomadic (Chichimec) Tarascans under Hireticitame separated from the main group in the Zacapu-Naranja area just northwest of the Pátzcuaro Basin. For about four generations they occupied the northern portion of the basin with a center at Vayameo (Bayameo, Uayameo, etc.) near modern Santa Fe de la Laguna—probably at the base of the Cerro de Guayameo just to the northwest of Santa Fe. When these Chichimec Tarascans entered the lake basin they found the region occupied by two groups of sedentary agricultural and fishing Tarascans: an older group (known as islanders because they lived primarily on the islands and coastlands) with a center on the island of Xarácuaro (Jarácuaro) and a younger group (known as snake-Chichimecs) who occupied the lands to the east of Lake Pátzcuaro with their main settlement at Curínguaro (modern San Simón Quirínguaro, which formerly belonged to the jurisdiction of Acuitzio—"place of snakes"). For two generations the most recently arrived Chichimecs wandered over the region in the southern part of the basin, made alliances (first with Xarácuaro and then with Curínguaro), and finally under Tariácuri (whose mother was from Xarácuaro, and whose wife was a daughter of the chief of Curínguaro) settled down at Pátzcuaro. The sons and second cousins of Tariácuri completed the conquest of all of the Pátzcuaro Basin and of most of central and northern Michoacán, divided the nuclear area into three parts (with capitals at Pátzcuaro, Cuyacan or modern Ihuatzio, and Michoacán or modern Tzintzuntzan), and began the conquest of southern Michoacán, Jalisco, and Guanajuato. When the line of Tariácuri became extinct in the third generation, the kingdom was divided between Hiripan of Cuyacan (who was the senior ruler) and

Tangaxoan of Michoacán. When Hiripan's son Ticatame died, the primacy moved to Michoacán where Tangaxoan's son Zisispandaquare was ruler. Zisispandaquare extended the Tarascan kingdom into Jalisco, Colima, and Guerrero, defeated the Mexican armies in the east, and divided the Tarascan state into four parts or quarters. His grandson was Tangaxoan Zincicha, who was ruler in 1522 when Michoacán was conquered.

There is no mention of Cocupao (Quiroga) in the *Relación*. Localities mentioned in the Quiroga area, which can be identified, are: Peñol de Capacureo (known as Peñol de Capacuaro and Cerrito Uarapo in the *títulos* of Santa Fe and San Diego Cocupao; shown on Beaumont and Seler maps as Yrapo; now known as Cerro Huarapo or Cerro de San Miguel); Xenguario (modern Capula); Teremendo; Xajo (later Jaso and Xaxo, modern Sajo); Santa Fe; Vayameo or Uayameo (at foot of modern Cerro Guayameo); Yzipamuco and many variants (Itziparamuco of colonial times, near modern Cuenembo); and Tarianan or Taria-yaran, under the lord Zinzuni, which became the Cuidad de Michoacán of conquest times (modern Tzintzuntzan), and its barrio Yavaro. Among other identifiable places in the general region are: Matoxeo (Matujeo), Sipiaxo (Sipiajo), Vaniqueo (Huaniqueo), Uangao (Huangao), Chucándiro, Hetucuario (modern Tarímbaro), Araró, Cinapecuaro (Zinapécuaro), Vayangareo (later Guayangareo, Valladolid, and Morelia), Matalcingo (Charo), Tiripitio, Tiristarán, Naranja, Zacapu, Puruándiro, Erongarícuaro, Zurumútaro, Pazcuaro (Pátzcuaro), and all of the islands of the lake, as well as Mount Tariácuri back of Tzintzuntzan, etc.

Apparently the general Tarascan people were divided by blood and by position. The related ruling families of Chichimec ancestry and their lesser Chichimec followers (all of Zacapu-Naranja or Sierra Tarascan origin) constituted one blood grouping with no other known name than the Mexicano one of "Chichimec" applied to them by the Spaniards and their Mexicano followers and interpreters. Possibly included with this blood grouping were the "snake-Chichimecs" of Curínguaro, Yzipamuco, Tarianan, etc., whose rulers were much intermarried with the later Chichimecs. The other great blood group was

composed of the aboriginal common people or fishermen and farmers (originally known as *ysleños* or islanders) who became known as Purépecha or plebians. In time the terms "Tarascan" (derived from a Spanish mistake) and "Purépecha" became synonymous and were applied to all individuals of the speech which is now termed "Tarasca" or "Purépecha." After the lake area was fully conquered and pacified, Hiripan and Tangaxoan placed *caciques* (an alien term used by the Spaniards) or lords (*señores*) in all of the pueblos and *barrios* to supervise the collection of wood for the temple fires, to lead the people in time of war, to gather people for the public works, and to take the census and collect tribute. The kings and the *caciques* or lords were also the sacrificial priests. This would indicate that there was an integrated upper class, comprising the royal and noble families of Chichimec ancestry, who also constituted the priesthood, the government, and the leading warriors. Just how the land was divided is uncertain. There is mentioned an official who knew all the land titles and who attended to disputes over lands. Probably the peoples of the pueblos owned and worked certain specific lands, which lands also belonged to the lords through allotment of usufruct. Also, probably there was a feudal hierarchy of lords.

ENCOMIENDAS

When Cristóbal de Olid conquered Michoacán for Hernán Cortez in 1522, a census was made of the pueblos, and one or more pueblos were assigned (*repartimiento*) and the people were entrusted (*encomienda*) to each of a number of the conquerors. Apparently Cortez had assigned to himself all of the pueblos or *barrios* immediately dependent on or belonging to the lord of Michoacán-Tzintzuntzan, which included all of the settlements in the lake region. Cortez, during his period of control from 1522 to about 1528-29, was represented by a Spanish *mayordomo* in Tzintzuntzan who collected the tribute. When Cortez was dispossessed by the first audience, a representative of the audience collected the tribute until about 1531-34 when a *corregidor* was established in Tzintzuntzan to supervise and protect the Indians and collect the tribute. The functions of the *corregidor* were merged with those of the *alcalde mayor* in Pátzcuaro some time between 1542 and

1554. It must be assumed that during all of this time Cocupao paid its tribute to the representative (of Cortez, of the audience, and then of the king) in Tzintzuntzan. However, it is apparent that the royal and noble Tarascan lords continued in possession of their villages, and merely shared the usufruct with the Spaniards. This is indicated in various land titles, from 1522 into the seventeenth century, which show the Puruata, Guanga or Cuinierangari, Paranguarende, and Huitziméngari families (all descended from kings of Michoacán) selling or making grants of lands which comprised most of the territory from the Hacienda of Chapultepec northwestward to San Jerónimo Purenchécuaro. In this connection there is an interesting sequence of probably related facts. In the legendary period a Zinzuni was lord of Itziparamuco, and another Zinzuni was lord of Tarianan (Tzintzuntzan); and these lords were related to the lords of Curinguaro and to the Chichimec lords who finally established their capital in Tzintzuntzan. The descendants of the Tarascan kings, of the above-mentioned family names, were Indian governors of Tzintzuntzan and Pátzcuaro under the Spaniards. Much or all of the lands which became the Hacienda of Itziparamuco in the seventeenth century, and out of which was derived the Hacienda of Atzimbo of the eighteenth and nineteenth centuries, belonged to Don Luis de Castilleja y Paruata and his sisters Mariana and Beatriz in the early part of the seventeenth century. Therefore, it seems possible that the lands that now constitute the eastern parts of the municipalities of Quiroga and Tzintzuntzan were held by the same Indian (and later, mestizo) family from the fifteenth into the seventeenth century.

The *encomienda* system was never very well established in the Pátzcuaro region. After the Cortez period (1522-29), all of the Indians in the basin were tributary directly to representatives of the crown excepting for the Juan Infante period (1539-54). Under some pretext Infante in 1539 obtained a number of the western and northern pueblos of the lake basin, and he continued to hold these pueblos in *encomienda* until Bishop Quiroga in 1554 won a suit which held that all of the villages in the basin were *barrios* or suburbs of the City of Michoacán (Tzintzuntzan, and later Pátzcuaro) and were not subject to separation from the jurisdiction of that city. From the Suma de

Visitas (Paso y Troncoso, 1905) and from Quiroga's lawsuit against Infante we know that among the villages held by Infante were Xarácuaro, Erongarícuaro, and Purenchécuaro, and that attached to Purenchécuaro were Hazcuaro (not identified but probably San Andrés Ziróndaro since it was stated to be on a promontory extending into the lake), Guanímalo or Guaramelo (probably Santiago Arameo east of present Cuenembo since it was stated to be between Tzintzuntzan and Tiripitio), Chupícuaro, Cutzaro, and Zirandangacho. This would indicate that Infante held all of the lands along the northern shores of Lake Pátzcuaro, excepting those obtained for Santa Fe in 1534 and 1538 by Quiroga. Since the Suma de Visitas lists Capula, Jasso, and Tiripitio as bordering Zirandangacho and the lake pueblos of Juan Infante administered from Xarácuaro, it appears that Cocupao must have been included within the *encomienda* of Infante. We have no records from this period, but probably it made little difference to the inhabitants of Cocupao whether they paid their tribute to the crown or to an individual Spaniard. After 1554 there were no pueblos held in *encomienda* in the Pátzcuaro Basin or in the adjoining areas to the north and east, such as Teremendo, Jasso, Capula, and Tiripitio. Since there were no mines of precious metals in the area, and no *encomiendas* after 1554, it is evident that the colonial history of land settlements and land holdings in the area consists principally of the parts played by the Indian villages, the missionary orders, the Indian nobility, and the Spanish (and later, mestizo) *vecinos* or citizens of Tzintzuntzan, Pátzcuaro, and Valladolid-Morelia.

THE INDIAN VILLAGE OR PUEBLO

At the time of the Conquest the Tarascan Indians were a basically agricultural people distributed in many settlements of various sizes, the smaller of which were attached as *barrios* (*uapatzequa* in Tarascan) to more important places. Location of these settlements was determined by the occurrence of water, wood, and arable land. The remains of two prehistoric "temples" or *yácatas* (literally, mounds or heaps of stones) in the town of Quiroga, various areas of concentrations of potsherds and obsidian knives, and the occasional find of vessels, figurines, grinding stones, mirrors, stamps, beads, and other artifacts throughout the terrain testify to the ancient presence of a number

of settlements within the area subject to the modern town of Quiroga. Similar structures and artifacts are to be found throughout the municipality and the entire region. The number, size, and pattern of these prehistoric settlements are uncertain because we made only a limited archeologic survey, and we had the time to excavate only a small area near the Yácata del Calvario in the upper part of Quiroga. From the archeologic evidence, the unpublished and published illustrations to the *Relación de Michoacán*, and various accounts of the middle sixteenth century, it would appear that the typical settlement consisted of about 38 houses and 190 inhabitants (ranging from 4 houses up to more than 200, and averaging about 5 persons to the house). The isolated homstead did not exist, but the pattern of settlement was open and without evident plan excepting that there was a tendency to cluster around the temple mound or the source of potable water. All settlements had a permanent or nearly permanent source of water near at hand, but only the larger places possessed temples—as indicated by the presence of *yácata* ruins. From the archeologic evidence, and from the maps and records of the sixteenth century, it would appear that there were important settlements, within the Quiroga region, at San Andrés Ziróndaro, San Jerónimo Purenchécuaro, Chupícuaro, Guayameo-Santa Fe, Cutzaro, Huarapo, Cuinario-Quiroga, Calvario-Quiroga, La Tirimicua, Icuácato, Sajo, Arameo-Itziparamuco-Cuenembo, and the original locations of Sanambo and Zirandangacho. All of these settlements were considered to be parts or *barrios* of Tzintzuntzan, and each settlement possessed a number of small dependencies which perhaps were established for the more efficient exploitation of soil, water, woods, and minerals.

After the Spanish Conquest the larger settlements became known as *pueblos de Indios*, and the smaller places were either lumped in with the larger or were called *pueblecitos*. The larger *pueblos de Indios* became the basic governmental and tributary units under the term *república de Indios*, and in these communities the missionary orders established their convents, or if there were no resident friars there would be at least a chapel or small church erected which would be visited periodically. During the sixteenth century the settlement pattern became less open and disperse. This was due primarily to the great reduction in

population produced by the initial Conquest, the later incursion of Nuño de Guzmán 1529–30, and the devastation by introduced diseases. Beginning in the 1530's and culminating in the period 1593–1603, the remnant populations of several contiguous pueblos were brought together or congregated in the central or most suitable locality. Commonly the name of but one of the constituent pueblos would be retained, although Jaso and Teremendo (congregated with several other communities just north of Quiroga in 1603) were known as Jasso-Teremendo throughout the remainder of the colonial period, and the earlier congregated pueblos of Sanambo and Zirandangacho were known as the pueblos of Sanambo-Zirandangacho at the time of their congregation in 1603 with Cocupao. Although the inhabitants might be moved off their lands, they continued to claim and own them legally. It was as a result of the various congregations that many of the pueblos of Michoacán, including Cocupao, claimed considerable territory. These congregations were made in the name of more efficient religious instruction by the comparatively small number of friars available. Every congregated pueblo had a church, and the church became the center of the community in practically every way. As early as 1523 the crown had made regulations concerning new settlements of cities, towns, and other places (*lugares*), which specified that there be a central square (*plaza*) with streets going out from it, and that there be ample public lands at the exits (*ejidos*) to allow for expansion, for the movement of livestock, etc. The 1523 and later regulations were codified and made more explicit in the *Ordenanzas para descubrimientos, nuevas poblaciones y pacificaciones* of Philip II in 1573. Commonly, wherever possible, the settlement was laid out in accordance with the cardinal directions, the main *plaza* was placed in the center, the parish church and local governmental building would front the *plaza*, and streets led away at right angles from the sides and corners of the *plaza*. Usually, however, the rectangular pattern obtained only in the immediate vicinity of the central square. In 1567 the viceroy of Mexico ruled that every *pueblo de Indios* should have 500 *varas* (Spanish

yards) of arable land measured toward each of the "four winds" from the last inhabited house on each side of the community. The Spanish landholders managed to have most of the measurements made from the church instead of from the periphery of the settlements, so that many Indian villages had no *ejidos* or arable land outside of the pueblo. Cocupao, for example, was limited at the village exit toward the south by the lands of a *vecino* of Valladolid during much of the sixteenth century. The condition of the Indians became so aggravated that in 1687 a royal cedula raised the radius from 500 to 600 *varas* and insisted that it be measured from the last houses. However, the pressure of white and mestizo landholders was sufficient to have this regulation modified in 1695 so that measurements were made from the church.

The limits, settlement pattern, and properties of Cocupao during the entire colonial period are quite uncertain. Practically all of our information comes from the papers accompanying lawsuits over boundaries with Santa Fe, Tzintzuntzan, and the hacienda which held the lands to the east from the seventeenth into the nineteenth century. The Indian community of Quiroga possesses a notarized copy, made in Morelia in 1837, of all the titles and papers pertinent to the boundaries and claims of Cocupao from 1522 to 1803 which could be located in the archives in Morelia and in the possession of the community. These papers are chiefly the briefs that were drawn up at the time of each lawsuit, which briefs would copy all extant pertinent titles and summarize the actions that had been taken previously. Unfortunately there is no copy but merely a reference to the title of 1522 (granted by Antón Paranguarende to Cocupao) which the audience of Mexico had found valid. The other important documents are the first royal title issued in 1534, the act of congregation of 1603, the 1681–82 act of measuring the legal town site, and the 1714–19 reviews with a statement of the boundaries of Cocupao. Most of the litigation in the colonial period was with Santa Fe; we found nothing in the Cocupao documents concerning controversies with Tzintzuntzan, and we did not have the time to examine the Tzintzuntzan docu-

ments. In 1920, in connection with attempts to reclaim lost lands under the provisions of the 1917 constitution and the agrarian code, the Cocupao documents were copied in the Agrarian Office in Morelia, and copies are on file there and in Mexico City. We made copies of all the material concerning Cocupao—Quiroga, and also Santa Fe and the Hacienda Atzimbo, which were available in the Agrarian Offices in Morelia and Mexico City. We compared all proper names in the typewritten copy of the Cocupao material with the longhand copy of 1837, and also consulted local authorities on the proper form and location of the various places mentioned. Nevertheless, there are many place names that either have gone out of use or are unrecognizable in the forms in which they occur. Because of deterioration of papers many long gaps occur and often important dates and names are missing. At best, this material provides a picture of the source material that is available for many pueblos in Mexico. It is possible that the survey and census of resources and population (ca. 1593–98) and the resultant study and recommendations (ca. 1599–1602) which led up to the congregation of 1603 for Cocupao-Sanambo-Zirandangacho may be in the national archives, but we were not able to locate this material.

In reconstructing the land settlement pattern and history of Quiroga we must begin with the archeologic evidence. Within the area of the modern town there were settlements around the Yácata del Calvario and northwestward to the spring of Petatarío in the northern parts of *cuarteles* II and III; in the area from the Yácata del Lindero southward into the western part of *cuartel* II near the Plaza Vieja and on westward to the spring of Atzitzíndaro; around the spring of La Tepóricua and westward past the present cemetery perhaps as far as the present Plaza Principal within *cuartel* III; and along the Arroyo de Quiroga within *cuartel* I. There may have been a settlement in *cuartel* IV in the vicinity of the present parish church and the former Franciscan convent, but the entirety of *cuartel* IV is poor in archeologic finds as compared with the other areas. It is of interest to note that the majority

of archeologic finds have been made in areas close to a permanent supply of water. The area of *cuartel* IV is the only one with no springs, seeps, or permanently flowing streams.

The first historic mention of Cocupao is the reference to the title granted in 1522 by Antón Paranguarende, but there are no details. The next mention is the *Título Original y Congregación* of the Pueblo de San Diego de Cocupa granted in 1534 by the second audience in the name of Charles V. There is reference to a statement of congregation drawn up by Pedro Díaz Aguero (*Procurador general de los indígenas de Nueva España*) for presentation to the *audiencia*, but since this is lacking we do not know the actual date of the congregation, nor by whom carried out (probably by Don Vasco de Quiroga, *oidor* of the audience who was in the Pátzcuaro area in 1533–34, or else by Juan de Villaseñor who was sent as an inspector to help the Indians in 1531), nor do we know what pueblos were incorporated in the congregation. The original congregator was more likely Villaseñor than Quiroga since the *título* expressly states that Don Vasco de Quiroga “should not come and take away the lands from the natives of San Diego Cocupa.” The title was delivered and the boundaries were paced off and markers established by Judge Bernabé de Cortez and scribe Antonio de Alvarez, both probably of Michoacán-Tzintzuntzan. The witnesses included representatives of Cocupao, Santa Fe, Tzintzuntzan, Capula, and Icuácató; and among those who signed were Antonio Gitziméngari Calzonsi (son of the last Tarascan king, and *regidor* of Michoacán), and Diego Sirauata (governor of Tzintzuntzan). In general the area designated to Cocupao began with the peak of Tzirate to the north, ran south to the lake and Patambicho, eastward to an uncertain point east of Los Corrales, northward along the heights west of Capula and northwest between the Cerro Azul and Icuácató to Tzirate. Essentially this is the modern town of Quiroga and its ranchos without Icuácató but including parts of Santa Fe and Tzintzuntzan (Patambicho, Santa Cruz, Corrales, Los Alamos, Las Pilas, Cuenembo, and El Tigre). The markers were not permanent, since they varied from buried charcoal to planted

cactus. In the following tabulation we give the names of boundary points as they appear in the

title of 1534, and their equivalents according to the people of Quiroga at present:

<i>Título 1534</i>	<i>Modern names or presumptive location</i>
Monte Tzirate Uataro.....	The mountain El Tzirate.
Cerrito Aramet.....	Cerrito de las Rosas or Ichapetiro.
Arbol Ucaciret.....	Cerrito de las Piedras, by <i>potrero</i> Tepamal.
Ojo de agua Ytzipararacu.....	On Mesa de Santa Fe.
Cerrito Uarapo.....	Cerro Huarapo or San Miguel.
Uarieho Angameo.....	Somewhere by the lake.
Piedra Tzacapo Casangario in patio of the chapel of Patambicho.	Outskirts of the habitations in the rancho of Patambicho.
Zitizicuaro.....	Outskirts of Los Corrales.
Yracho.....	???
Arbol Alamo.....	Rancho Los Alamos.
Monte Tupusohuato.....	Loma del Metate near El Tigre.
A stone's throw from the chapel of San Miguel Guarazo....	???
Loma Guatzivet chagaricu.....	Cuesta de las Tres Cabezas near Capula on old road to Morelia.
Monte Yraocojuato.....	The hill Yrauco, belonging to Sanambo.
Piedra <i>que echa lumbre</i> on <i>camino real</i> from Pátzcuaro to Chucándiro.	Piedra de La Luna, north of Icuácato.
Monte Tzirate Uato.....	El Tzirate.

Since representatives of San Juan Icuácato were present, we doubt that the *piedra que echa lumbre* (stone which strikes fire) was the same as the present Piedra de la Luna which is a large imbedded rock on the northwestern limits of modern Icuácato. To back our belief that Icuácato did not belong to Cocupao during the sixteenth and seventeenth centuries is the fact that Icuácato was a *barrio* of the Pueblo of Xaxo or Sajo when it was congregated with Teremendo, Coro, Tzintzimakato, Carupo, San Pedro Chicuécuaro, and Asajo in 1603. There is no mention of Atzimbo or Caríngaro during the sixteenth century, although their present areas fall well within the boundaries outlined above for Cocupao. Although Sanambo is mentioned (along with Zirandangacho, Yaguaro, Ihuatzio, etc.) in 1569 as a *barrio* within the *doctrina* or parish of Tzintzuntzan, we have no idea as to its location during the sixteenth century. Zirandangacho is mentioned as an *Infante pueblo* of the period 1539–54, and in the maps reproduced by Beaumont and Seler from about 1540 it appears in approximately its present location. Cocupao, in the same maps of about 1540, appears in its present location with reference to the indicated positions of Santa Fe, the Cerro Huarapo, Lake Pátzcuaro, and Zirandangacho.

We can imagine the Quiroga of 1534 as being an aggregation of four or five groups of huts sprawled over the slopes between La Tepóricua and the Arroyo del Cerro Azul on the east and the Arroyo

de Quiroga and Atzitzíndaro on the west. Probably in the same year a small church was built (with San Diego de Alcalá as its patron saint) near the site of the present church, which was visited occasionally by Franciscan friars from Tzintzuntzan 5 miles away. The *título* of 1534 provided for the building of a church, and the pronomen of San Diego would indicate that the matter was under way. Although we know that a Franciscan convent dependent on that of Tzintzuntzan was built in the block just east of the present parish church, and that a hospital (Indian community house and not an infirmary) or *guataperá* was constructed where the municipal building is now, probably they were not erected until after the *oidor* Quiroga had become the bishop of Michoacán; i. e., after 1538 and possibly not until after the visit of the Franciscan Ponce in 1586. The friars organized the above-mentioned groups of habitations into wards or *barrios* of the village with a chapel and patron saint for each. Only four names have come down into the nineteenth century (of which only one—San Miguel—is still used), and this tends to confirm our idea that there were only four nuclear communities in Cocupao proper. Besides San Miguel, there were La Ascensión, San Francisco, and San Bartolo. The *barrio* of San Miguel, or, as it is more commonly known, El Calvario, occupies the highest portion of Quiroga in the northern parts of *cuarteles* II and III above the streets known as Comonfort, Olivo,

Cuerno, and Doblado. This would represent the Yácata del Calvario-Petatario group. San Bartolo (also known as *barrio* de los Tecolotes and de los Negros) occupied the area from the hospital and the present Calle Nacional south and west to and across the Arroyo de Quiroga. Its chapel in the early part of the nineteenth century was in block 4 of *cuartel* I. The location of the other two *barrios* is uncertain. La Ascensión most probably was the northeastern one that embraced the Tepóricua area, which would place San Francisco in the center west toward Atzitzindaro.

In this connection we will mention two apocryphal stories about the foundation of Cocupao. Nicolás León (1887-88), writing in 1884, states that the original settlement was located at the spring La Tepóricua (also known as the Ojo de Agua de Cocupa), and that the name Cocupao was a corruption from Cucupa or Xucupan; and León goes on to discuss the occurrence and meaning of Xucupan on the map or *Lienzo de Jucutacato* and the visit of the inspector-general Ponce to the village of Tacupan in 1586. At present no one in Quiroga admits the possibility that the original settlement was at La Tepóricua, and some of the old Indian residents say that the original settlement was around the Yácata del Calvario, and others claim that the earliest settlement was in the region of the hospital or *guatapera*, and that they were slowly dispossessed and forced northward into the *barrio* of San Miguel during the middle part of the nineteenth century. As for Xucupan or Tacupan, historians cannot agree on the meaning of the Lienzo de Jucutacato, although one school insists that it represents the advance of Augustinian missionaries into Michoacán; in which case it cannot apply to Cocupao since the Quiroga region was Franciscan throughout the colonial period. León, and others after him, have accepted the identity of the *pueblecito* of Tacupan visited by Ponce in 1586 with the pueblo of Cocupao, but they did not examine the Relación de Alonso Ponce and other contemporary records critically. Ponce expressly states that on his way from Pátzcuaro to Tzintzuntzan he passed by an important wheat mill or *molino*, that one-quarter of a league past the *molino* he encountered the little settlement of Tacupan, that the same day he continued on to Tzintzuntzan, and that after leaving Tzintzuntzan he followed the lake closely leaving Santa Fe to his right as he proceeded to Purenchécuaro. When

the Spaniards arrived in Michoacán, Lake Pátzcuaro completely encircled the present Cerro Blanco or Apohuato, and during colonial times the road from Pátzcuaro to Tzintzuntzan had to circle far to the east so as to avoid the lake and swamps which extended nearly to the present Hacienda Chapultepec. Furthermore, there are numerous records of the settlement of San Antonio Tacupan which in the seventeenth century became the Hacienda de San Antonio Chapultepec and included the wheat mill or Molino de San Rafael. Undoubtedly the location of Ponce's Tacupan was the present San José about half a mile north of the mill within the ex-Hacienda of Chapultepec.

The other story we obtained from Don Agustín Ponce, one of the older residents who speaks Tarascan, which he learned as a child while living in Santa Fe. According to this story, after Don Vasco de Quiroga had founded Santa Fe and had given it lands (1534), an old widow stopped Don Vasco as he was riding past, knelt before him (in a position called *cucutaco*, which has been corrupted into Cucupao), and begged him for a grant of land to support her family. Don Vasco promised to give her all the land within the radius of a sling-shot (*honda*) throw, but she was weak in her throw, so Don Vasco arbitrarily gave her all the lands from those of Santa Fe to La Tepóricua. Then the first settlement was made in what is now the *barrio* of San Miguel. Considering the testimony of the *títulos*, the whole story seems to be a patchwork of fact and fancy. Furthermore, to derive Cocupao (which means place of the *corcova* or hump or humpbacked, in good Tarascan) from *cucutaco* (squatted, or *en cucullas*, on haunches with elbows on the knees) seems rather farfetched. Practically all authors who have dealt with Tarascan place names give the "hump" derivation of the name. However, the reason for assigning such a name seems rather obscure. It is possible that the place was named after some early humpbacked resident, just as one of the origins of the name of a nearby town (Coeneo) is given as the place of the person with *tisis* or tuberculosis. It is more likely that the name was derived from some salient natural feature, such as the Cerro de Huapapo which (according to the Beaumont map) already in the sixteenth century possessed a humpbacked profile; and Romero (1863) claims that the name was derived from a hill with a hump. Torres (1915, vol. 3) gives a garbled form of the

story we obtained from Ponce. According to Torres, Cocupao means "a stone's throw" (*tiro de piedra*), and was given because each landless Indian in the area threw a stone to establish the extent of his property. Torres probably had noticed, in scanning colonial titles, that often there was mention of throwing in connection with the granting of title to a piece of property. Actually this was an old European custom in which the person about to be invested with a piece of property would pick up a handful of earth and a handful of grass or herbs and would walk over the property. The Santa Fe title gives the Michoacán version of this act as follows: the presiding judge took the representative of the Pueblo de Santa Fe by the hand and put him into the newly acquired lands, and the representative then took stones and threw them from one part to another (*tomó las piedras y las echó de una parte a otra*) and gathered grass and walked over the lands, and was challenged by no one.

During the sixteenth century began the long series of controversies with Santa Fe. As has been mentioned, the *oidor* Don Vasco de Quiroga about 1533-34 founded the Pueblo Hospital de Santa Fe de la Laguna. According to the 1538-39 title of Santa Fe (in the 1803 notarized copy), about 1533 Don Pedro Guanga (Governor of Tzintzuntzan) and his wife Doña Inez gave to the proposed hospital lands which occupied the triangle from the peak of Tzirate to the lake at Chupícuaro, along the lake to a point opposite the Peñol de Capacuaro (also Cocontal, Toscontal, and Huarapo), and northward up the valley of Patacazcuaro (which contains the present Potrero Grande del Lindero and the drainage of Atzitzíndaro) to the Tzirate. A few years later Don Pedro added lands to the south and east of the Cerro Capacuaro or Huarapo, extending as far southeast as the *estancia* or cattle ranch of Juan de Villaseñor. This second grant apparently consisted of the lands now known as Sámano (just south of Quiroga town), which were claimed by Santa Fe as late as 1711 (in a dispute with Cocupao and Tzintzuntzan), and which were in the possession of Tzintzuntzan during most of the nineteenth century. The *estancia* of Villaseñor probably constituted the lands which shortly came into the hands of the Cáceres family of Valladolid, and which became the Hacienda de la Tenería in the seventeenth century. Probably

this Juan de Villaseñor was the Juan de Villaseñor y Orozco who visited Michoacán in 1531, and later became the great *encomendero* of Huango and Puruándiro to the north, and the ancestor of many famous people, including Father Hidalgo and Emperor Iturbide. The above-mentioned lands were added to and the titles were made ironclad by royal and viceregal cédulas (1535, 1538, 1539) obtained through the influence of Don Vasco de Quiroga. This is an important point, since in all the later colonial history of disputes between Cocupao and Santa Fe, the reviewing officials would acknowledge that Cocupao was entitled to its 500 *varas* in all directions, but they could not get the full 500 toward the west and the south because of the royally backed titles possessed by Santa Fe. Cocupao was in the unfortunate position of being an unimportant pueblo with no powerful advocates, while Santa Fe was the pet project of Vasco de Quiroga who (as *oidor* and later Bishop of Michoacán from 1538 to 1565) was the most powerful individual in Michoacán and one of the most influential in all Mexico and the Spanish possessions. After the death of Quiroga in 1565 Santa Fe continued under the direct administration and protection of the bishops of Michoacán (through their deans and cabildos of the cathedral). Since the Indian pueblo of Santa Fe constituted a parish of the ordinary clergy from its founding, the bishops (who appointed the local priests or rectors) were naturally concerned with preserving the boundaries of Santa Fe and the income from the lands at their maximum.

After the events of the 1530's, there is little of note in the settlement history of Cocupao until the seventeenth century. By the 1590's the ravages of epidemic diseases had so reduced the population that another congregation was necessary. The Indians of the Pueblo de Tzirandangacho e Tzanambo were located in the Pueblo de Santiago adjoining the Pueblo de Cocupao (*junto al de Cucupa*), but they complained that the lands were useless because they were either exhausted or too swampy. The location of the Pueblo de Santiago and these lands is uncertain. Possibly the scribe meant lands within the pueblo of San Diego Cocupao since San Diego is sometimes a variant of Santiago. Furthermore, there is still a swampy area with many little springs between present Zirandangacho and Quiroga.

However, there is a piece of land just south of Zirandangacho by the Arroyo del Salto which is sometimes referred to as the Rancho de San Diego. At any rate, in 1603 Baltazar Dorantes de Carranza (commissioner for the congregating of Indians) and Francisco de Soria (royal scribe for the distributing of lands) reassigned lands to the Indians of Zirandangacho (Sanambo is not mentioned) within lands owned by Alonso de Cáceres of Valladolid (the area now known as La Tenería). Apparently the Indians did not gain actual possession of these lands, because in 1681 we find that (a) the Pueblo de Cocupa complained that it did not have the "500 varas utiles" to which it was entitled by law, (b) the land titles of Santa Fe were found to be valid, and (c) a survey was made with a measured cord and allotments were made in the lands "that had belonged to Alonso de Cáceres."¹

The allotments made in 1681 to activate the assignments of 1603 were measured with a doubled hemp cord of 50 *varas* length under the personal supervision of Captain Alonso de Alcocer Dábalos, *alcalde mayor* in the province of Michoacán. However, the area was measured as a unit and not into the individual parcels mentioned in 1603. Those parcels had varied from 1 by 40 *brazas* up to 3 by 40 *brazas*, depending upon the size of the family. At maximum this was less than a tenth of an acre per family. Also, to give Cocupao the equivalent of the land to which it was entitled, 1,300 *varas* were measured south from Cocupao. The village of Cocupao was still dissatisfied. In a petition of 1682 to the *audiencia*, Cocupao repeated that it did not have the "500 varas utiles"; that the 1,300 *varas* to the south were in exhausted or swampy ground; that northward it possessed only 250 *varas* along the highway to Teremendo; that to the east there were no lands because of an arroyo, hills, and swampy land; and that there were only 200 *varas* to the west. Later in the year the audience ordered that "500 varas utiles por todos cuatros vientos" be given to Cocupao, as well as effective occupation of the lands assigned at the time of the 1603 congregation. Evidently the recorded assignments, allotments, measurements, etc., of the previous 79 years had not resulted in the actual acquisition of land of any description whatsoever. Finally on August 14,

1682, the *alcalde mayor* had the measurements made "to the four winds" with a cord of 50 *varas* in the presence of witnesses from Cocupao, Santa Fe, Tzintzuntzan, and a representative of Alonso Rodríguez (the renter of the Hacienda de la Tenería which had been established in the lands that formerly had belonged to Alonso Cáceres). It is of interest that one of the two Spaniards who handled the measuring cord was a Manuel Ponce de Rueda who was a member of the Ponce family which owned the lands immediately to the east of Cocupao, but that there was no mention made of a representative of the eastern neighbor. First were measured 1,380 *varas* southward to an arroyo (Arroyo del Salto) which was the boundary with Tzintzuntzan. Next were measured 100 *varas* north from the last house in Cocupao to the vicinity of the little village of San Miguel Cutzaro. Finally (there was no attempt to measure toward the east) 370 *varas* were measured westward, which carried somewhat into the territory of Santa Fe. In total Cocupao was given 1,850 of the 2,000 *varas* to which it was entitled. On the same day Santa Fe petitioned the *audiencia* to reexamine its titles and to restore the lands given to Cocupao, and shortly the lands on the west side of Cocupao were returned to Santa Fe. Consequently, at the end of the seventeenth century the pueblo of Cocupao had practically no lands to the east or west, a slight amount of slope land to the north, and nearly all of its farm land to the south.

LAND-MEASUREMENT UNITS

When the Spaniards entered Michoacán they found the Tarascans employing a number of units of linear and areal measurement. The names and values of only a few of these can be recovered from the colonial literature. A basic linear unit was the *pirimu* (*pirimucua*, *perimo*), which is given variously as 1 *vara* and 1 *braza* of Spanish equivalence. The *tzitacua* (cord or rope) was a piece of land 20 *brazas* wide and of varying length. A larger area was the *paracata* (literally butterfly). The Spaniards brought with them a variety of units of measurement, any one of which varied in its accepted value according to what part of Spain the user came from. Commonly the Spanish crown and the Mexican audience, in their land regulations, used these measurement terms without defining them. With the passage of time the various units gained specific and common-

¹ See Land-Measurements Units, pp. 17-19.

ly accepted definitions in the different parts of Mexico. We have compiled a list of these units with their modern equivalents in Quiroga, as follows:

Dedo (finger)—16 *dedos*=1 *pie*.

Pulgada (inch)—12 *pulgadas*=1 *pie*; 1 *pulgada*=0.023 meter or 0.91 inch.

Palmo (palm or handbreath)—4 *palmos*=1 *pie*.

Pie (foot)—3 *pies*=1 *vara*; 1 *pie*=0.27933 meter or 0.916 foot.

Paso (pace or step)—a *paso común* contained 2½ *pies*, and a *paso geométrico* 5 *pies*.

Vara (yard)—2 *varas*=1 *braza*; 1 *vara*=0.838 meter or 33 inches.

Braza (fathom or span)—1 *braza*=1 *estado*; 1 *braza* varied between 1.62 and 2.00 *varas* in colonial usage, and is now 2 *varas*, 1.672 to 1.676 meters, and about 5.545 feet.

Estado (height of a man)—accepted as the same as a *braza*.

Cordel (cord)—a colonial *cordel* contained 50 *pasos* or 50 *varas* or 25 *brazas*.

Estadio or *Carrera de Caballo*—composed of 208.33 *varas*, 174.58 meters or 190.92 yards; actually approximating a furlong or 220 yards.

Milla (mile)—composed of 1,000 geometric *pies*; 1,666.66 *varas*; 1,298 meters or 0.807 mile (United States).

Legua (league)—composed of 3 *millas*, or 5,000 *varas*, considered to be between 3.894 and 4.19 km., or equivalent to 2.5 or 2.6 miles. There also was the legal *legua* of 4 *millas*; and in 1584 a league equaled 3 *millas* or 3,000 *pasos* or 60 *cordeles*.

(It will be noted that not all of the equivalents are consistent.)

Beginning early in the sixteenth century land grants and cessions were made on the basis of house plots, town lots, town sites, and the lands necessary for crop farming and animal husbandry in accordance with the rank of the individual. The gentleman with coat of arms and a horse (*escudero y caballero*) received a *caballería* or knighthold, and the footsoldier or *peón* received a *peonía*. However, the *peonía* was replaced in terminology quite early by *suerte*, *labor*, and other terms. The units of area were defined in terms of so many yards (*varas*) of radius, or so many *varas* toward each of the four cardinal directions, or so many *varas* on the sides measured “pañó y sedas,” i. e., measured along the width and the length. The large estates were often granted and defined in terms of radii, and this practice gave rise to many areas to which there was no legal title since obviously circular areas cannot be made to border other such areas throughout their circumferences. In actual practice the landholders absorbed most of these *tierras baldías*,

odiosas, or *mostrencas*, and developed land areas which had the shape of asymmetrical polygons. Proceeding from largest to smallest, the principal units of area were:

Hacienda (estate; literally, income property, or where something is done)—25,000×5,000 *varas*; 8,778.05 hectares or 21,697 acres.

Sitio de ganado mayor or *estancia* (cattle ranch or farm)—5,000×5,000 *varas*, or a square league; 1,755.61 hectares or 4,338.464 acres.

Sitio de ganado menor or *estancia* (farm for sheep and goats)—3,333×3,333 *varas*; 780.27 hectares or 1,928.133 acres.

Fundo legal para pueblo (legal town site)—after the 1680's it was 1,200×1,200 *varas*; 101.127 hectares or 244.14 acres.

Labor (field; literally where one works)—1,000×1,000 *varas*; 70.224 hectares or 175.532 acres.

Caballería (knighthold)—1,104×532 *varas*; 42.79 hectares or 105.756 acres.

Fanega de sembradura (field or seed plot)—there are as many different “bushel” acreages as there are kinds of seed; however, when the seed is not specified the area is commonly considered to be 276 × 184 *varas* (at one time it was 400 × 400 *brazas*); 3.555 to 3.566 hectares (roughly considered to be 4 hectares) or 8.75 to 8.81 acres. In colonial times 8 *fanegas* were considered to be the equivalent of a *caballería*.

Suerte (lot, patch of ground, piece of ground)—normally located within or near the precincts of a city or town; 552 × 266 *varas*; 10.278 hectares but varying actually between 1 and 6 hectares, and formerly considered to be ¼ of a *caballería*.

Yunta (yoke; area ploughed by a yoke of oxen in 1 day theoretically)—3.5 to 6 hectares.

Sitio de terreno de riego (irrigated land)—uncertain definition.

Solar (house plot or homestead)—50 × 50 *varas*; 0.1756 hectare or 0.43 acre.

Manzana (block; literally apple)—variable; often 0.672 hectare or 1.66 acres.

Vara cuadrada (square yard)—0.70 square meter or 7.55 square feet.

The terms “*puesto*,” “*predio*,” “*finca*,” and “*rancho*” had no areal significance. A *puesto* was any spot, place, space, shop or barracks, and was often used for the building or group of buildings where the laborers in some part of a large estate (*hacienda* or *sitio de ganado*) would sleep and eat. In time the term “*rancho*” replaced *puesto* in its last sense of mess hut or dormitory, and later was extended to a stock farm, any small farm, and any collection of homes of small farmers or tenant laborers. *Predio* is any piece or parcel of real property; and *finca* is any real estate, especially a piece of property with a house or other building.

In 1856–57 the metric system was introduced into Mexico, and in 1862–63 Juárez initiated the use of the metric system in measuring and report-

ing lands. However, the metric system had little popular use until the use of the entire system was made mandatory September 16, 1896. Now, after half a century of presumptive use, the metric system is not used and is only imperfectly understood by the rural population of the Quiroga area; and its chief use is by the merchants and officials in town. The principal parts and conversions, pertaining to land measurement, are:

1 meter=39.37 inches or 1.09 yards.
 1,000 meters make 1 kilometer=3,280 feet, or 1,093.61 yards, or 0.62137 mile.
 1×1 meter=1 square meter=1 *centiárea*=10.76 square feet.
 10×10 meters=100 square meters=1 *área*=1076.4 square feet or 143 *varas*².
 100×100 meters=10,000 square meters=100 *áreas* or 1 *hectárea*=2.471 acres, and 1 acre equals 0.4047 hectare.
 $1,000 \times 1,000$ meters=1,000,000 square meters=100 *hectares* or 1 square kilometer=0.3861 square mile.

Measurements in the field were made (and still are) by pacing and with a marked cord or rope. Where wheeled vehicles could go, measurement was sometimes made by tying a rag on a wheel of a known circumference and counting the revolutions. Toward the end of the colonial period a formal measuring device (odometer or trocheometer) to count rotations and calculate distances was occasionally used on the main highways. However, until recently most long road distances and cross-country distances were calculated from elapsed time (using the movement of the sun instead of a watch) and conventional estimates of rate of progress of pedestrian, horse, mule, ass, stagecoach, etc. These distances were expressed in leagues, and were qualified as long or short, easy or hard, smooth or broken, etc. Since no compass was used, direction was obtained by reference to the sun, the pole star, and to various landmarks.

THE HACIENDA AND RANCHOS

From the previous discussion it will have been noted that a new element, the hacienda, entered the picture between 1603 and 1681. The hacienda, often an entailed estate or *mayorazgo* descending through the first-born son of succeeding generations, developed in the seventeenth century along with the white (and a few mestizo) families which in some five generations since the Conquest had managed to acquire wealth, prestige,

and property. In most cases in Michoacán the owners of haciendas were the descendants of *encomenderos* and *corregidores* who had taken advantage of their official positions to acquire lands at the expense of the Indians whom they were supposed to protect, in addition to some lands legally acquired by grant and purchase. Although the Spanish laws from the sixteenth century on repeatedly affirmed that no lands were to be taken from the Indians, the Indians were allowed to sell their lands (under certain restrictions which were seldom observed), and large tracts of land were acquired by dubious purchases. Periodically (especially in 1631, 1643, 1674, 1716, and 1754) the government of New Spain would issue confirmatory titles or *composiciones* (for a consideration) which would absolve the possessors from review and penalty for earlier irregularities, and which also served as perfect and guaranteed titles despite any imperfections in earlier titles. By the end of the seventeenth century there were two haciendas in the area of our study. La Tenería, which was a rented hacienda in 1681, and which presumably had been turned over (in whole or in part) to Cocupao, shows up in 1714 as a *capellania* (capital property the income from which was used to support an ecclesiastic) which constituted the southern boundary of Cocupao. We can surmise, from 1680 information in the titles of the ex-hacienda of Atzimbo, that Antonio de Cáceres y Secadura (the son or grandson probably of the Alonso de Cáceres of 1603) became afraid that some day the government might really take away the lands (as it had been doing on paper for so long), and therefore turned over the property or its usufruct to the church. This vested interest of the church may help explain why the Indians of Cocupao were never able to obtain actual possession of the land. However, we have no details of the nature or extent of the hacienda of La Tenería. It is quite probable that it was not a true *hacienda de labor* with many thousands of acres of land, but rather was devoted (as its name would imply) to the business of tanning hides and skins. There remains the truly great hacienda which came into being east and south of Cocupao sometime between 1618 and 1680.

Sometime prior to 1870 the Hacienda de Atzimbo was divided among the tenant farmers or *parcioneros*. We did not find out why or how this was done, but on May 31, 1870, the *par-*

cioneros asked the State government to go over the tattered remnants of the pertinent titles and make an authoritative copy which could serve as the basis for modern titles. The fragments of documents copied allow us to trace the main lines of the development of this hacienda from some time in the early seventeenth century up to 1736. The earliest document (which has no date but whose context indicates that it is from the first half of the seventeenth century) represents the sale by Luis Castilleja y Paruata to Francisco Ponce de León of lands termed El Tucuruyo whose described boundaries included nearly all the lands claimed by Cocupao (in its title of 1534) which lay to the east of the pueblo proper of Cocupao and the present site of Zirandangacho. In other words, these lands included all of modern Cuenembo, Atzimbo, El Tigre, La Noria, Santa Cruz, and Los Corrales, and possibly parts of Caríngaro, Sanambo, La Tirímicua and Icuácató, but only Santa Cruz was mentioned. The name Tucurullo is still applied to the area along the Arroyo del Salto between Atzimbo and the Puerta de Cuenembo. Castilleja mentioned that he had obtained this property by purchase from his sisters and by inheritance from his ancestors (who were of the royal Tarascan family). In this connection it is of interest that a legend relates that Atzimbo was named after Atzimba, a sister of the last Tarascan ruler. The next document, of 1680, refers to the hacienda of Nicolás Ponce de León (either son or grandson of Francisco Ponce de León), gives its boundaries (which are much the same as those given previously), and provides for renting a portion for the period of 9 years. The Hacienda de San Antonio Tacupare (later known as Chapultepec) together with Sanabria held the lands to the south, and La Tenería and Cocupa formed the boundaries to the west. The northern and eastern boundaries are uncertain. However, there is reference to a paper (*escritura*) issued by the Pueblo de Cocupao granting rental rights to unspecified lands. This probably was the basis for acquisition of the areas of modern Caríngaro, Icuácató, and Sanambo. Among the places mentioned within the hacienda were: The Pueblo Viejo de Arameo by a *malpais* or volcanic flow (the Malpais de Itziparamuco of Beaumont's map and the Malpais de Cuenembo of today); the Pueblo de Coenembo Santa Cruz; the Puesto de San Bartolomé Atzimbo; and the

Puesto de Tupuero y Jarambo y Arameo (it is possible that the copyist used the singular by mistake and the last item should read *puestos*). The renter, Nicolas Rentería, was to erect *puestos* and ranchos wherever necessary. A document of 1696 adds the Puesto de Itziparamuco and mentions Cuenembo and Santa Cruz as separate *puestos*.

Apparently the period 1680 to 1689 was when the term "rancho" was first applied to some of the *puestos*, and during the same period possibly such ranchos as Caríngaro, Icuácató, and Sanambo were established in their present locations. The latter two entities were in existence during the sixteenth century, but both were congregated about 1603. It is quite likely that the sites of the modern ranchos of Icuácató and Sanambo are the same as those of the original Indian pueblos of those names because ranchos and *puestos* were located where there was potable water, and many of the springs in the region have retained their Tarascan names even to this day. It would be logical that a rancho established at the spring of Sanambo, for example, should become known as the Rancho de Sanambo. We must insist (as we have pointed out elsewhere) on the non-Indian nature of the inhabitants of the ranchos, with the exception of La Tirímicua. The haciendas during the colonial period were worked mainly by mestizos and mulattoes, since the Indians worked their own lands for subsistence and in order to make the necessary contributions to the church, the governmental officials, and to the crown. The nature of the population, the pattern of settlement, and the form of economy in the Quiroga area differed in certain respects from the conditions that obtained elsewhere in Mexico. It was a region of comparatively dense agricultural Indian population, of poor pasture lands, and of minimal water supply in the dry season from February to May, which factors kept the large estates or haciendas from attaining the size of the *latifundios* in northern Mexico, and caused them to divide their attention between crop *labores* and cattle *estancias*. Actually there were no *haciendas de ganado* in the Pátzcuaro region, but rather they were *haciendas de labor* which would include one or more *sitios de ganado* or *estancias*. Although there were richly mineralized zones within 50 to 100 miles in all directions (for example Inguarán copper to the south, Ozumatlán and Tlalpujahua

gold and silver to the east, the silver of Guanajuato to the north, and the silver and gold of Tamazula to the west), the great Malpais de Michoacán within which the Pátzcuaro Basin was situated had no important deposits of the precious metals or of copper. Mining *reales*, the *mita* (a Peruvian term for *encomienda* of laborers for the mines) labor system, mining haciendas, and all the other manifestations of a rich mineralized zone were lacking in our Quiroga area. It was inland and divided between the temperate and cold climatic zones, so such items as a very negroid population, seaports, and a plantation economy based on tropical crops were lacking. The Indians had been pacified and completely sedentary since the 1530's, so there were no *presidios*, fortified churches and haciendas, and a paucity of small isolated settlements, such as obtained from Hidalgo to Sonora. Also, the Pátzcuaro Basin, with the exception of the city of Pátzcuaro itself, was Franciscan until the 1770's, although the Jesuits worked briefly in the *tierra caliente* of Michoacán, and the Augustinians dominated the region in a zone completely surrounding the Pátzcuaro Basin. The respective contributions of the Franciscans and Augustinians to architecture, settlement pattern, occupations and forms of economy, place names and personal names, dress, customs, and many other items would make a book in itself.

The area, nature, and settlement pattern of the Ponce hacienda becomes clearer with the information from documents of 1712 and 1714. In 1712-14 it was termed the Hacienda de Labor de San Nicolás Itziparamuco, and it belonged to Manuel, a son of Nicolás Ponce de León. The northern boundary was a *pedregal* on the road to Teremendo (Malpais de Icuácato or de Sajo) and the Cerro Cotzitiro (Cerro del Melón); at the north-east was the Cerro de Capula; adjoining at the east were lands of the Augustinian monks of Tiritipitio (Fontezuelas and Lagunillas) and the Loma de Santiago Arameo y Paratzico (probably the Cerro del Divisadero of today); the western boundary was still the lands of La Tenería and Cucupao; and the southern boundary remained the Hacienda de Chapultepec which contained the Puesto de San Antonio Tacupan, the Molino de San Rafael, and Sanabria. Juan Barriga is given as the owner of the Hacienda de Chapultepec, which may indicate a possible origin for the numerous Barriga family of today in the ranchos

of Quiroga. The area comprised five *sitios de ganado mayor*, two *sitios de ganado menor*, and 17 *caballerías de tierra*, which would amount to about 11,066 hectares or somewhat more than the conventional 8,778 hectares of an hacienda. This is the equivalent of about 111 sq. km., which approximates the area of the region as circumscribed by our interpretation of the boundaries. Scattered over the hacienda, in appropriate localities for the care of the livestock and of the cultivated fields, were dwelling houses, granaries (*trojes*), corrals, barns (*jacales*—in the Quiroga area the term *jacal* is applied to large permanent structures in which tools, fodder, etc., are kept), and other structures (*otras oficinas*), as well as a number of *puestos* and *puestecillos*. Manuel Ponce died between 1718 and 1722, and the hacienda passed into the hands of Francisco Ponce who died prior to 1736, and the lands were inherited by his son Nicolás Ponce de León. Apparently the hacienda was never converted into an entailed *mayorazgo*, since the younger sons and daughters were commonly named as inheritors along with the oldest son; but the evidence is contradictory since reference often is made to but an individual as owner. Probably the eldest represented the entire family in all legal matters, and as the senior he may have had an automatic right of attorney in all matters pertaining to family property. An example is the 1714 reference in the Cocupao papers to the eastern boundary of Cocupao being the lands of Don Manuel Ponce de León and his brothers and sisters. Also, especially between 1696 and 1736, there are several mentions of a Ponce de León purchasing a piece of property which was specifically designated as having previously been a part of the hacienda or patrimony. Probably when a Ponce de León needed some ready cash he would mortgage some part of the property, which might pass out of the hands of the family for a number of years. The papers dated between 1718 and 1736 add a few bits of information: the boundary of the hacienda with the Pueblo de Capula was specifically the Cerro de Capula (Cerro de Buenavista) and the Tres Cerritos (the Loma Guatzivet chagaricu of the 1534 Cocupao *título*, and the Tres Cabezas of today); the most southeastern part of the hacienda included La Cacana (the area around the Estación Chapultepec of today); some part of the hacienda had been set up as a *capellanía*

to defray the expenses of six masses a year by the Franciscan friars in Tzintzuntzan for the soul of Gerónimo Ponce de León (apparently a priest and uncle of Nicolás Ponce de León, the father of Manuel Ponce); another portion had its proceeds dedicated to the Cofradía del Santísimo Sacramento in Pátzcuaro.

After 1736 there is a hiatus in the records pertaining to the lands east of Quiroga until the 1870's. During this period, and probably prior to 1795, the great Hacienda of San Nicolás Itziparamuco was broken into several lesser haciendas with different owners. How, why, or when this took place we do not know. However, in the archives of the Ramo de Tierras for 1762-64 we discovered that the Hacienda de San Nicolás Itziparamuco had come into the hands of Isidro del Corral, and that about that time it became known as the Hacienda de Los Corrales, which would indicate that Isidro del Corral held only a portion of the original hacienda. From the Cocupao parish records we learn that in 1795 there already existed the haciendas of Itziparamuco, Cuenembo, Atzimbo, and Las Lomas del Metate; and that none of these haciendas included the ranchos of La Tirimicua, Sanambo, Icuácato, Caríngaro, and Zirandangacho, whose inhabitants were lumped in with those of Cocupao. In 1822 Lejarza credits Cocupao with four haciendas and five ranchos, and Tzintzuntzan with three haciendas and three ranchos, but the names are not given. We may assume that the Cocupao haciendas were Itziparamuco or Cuenembo or Corrales, Lomas del Metate or El Tigre, Atzimbo, and possibly La Tenería; and the ranchos were La Tirimicua, Icuácato, Sanambo, Caríngaro, and Zirandangacho. The Tzintzuntzan haciendas were San Antonio Chapultepec, San Nicolás Sanabria, and possibly El Tecolote; and the ranchos were Patambicho, and two others of whose identity we are uncertain.

For the anarchic period 1823 to 1859 we have located no records. In 1860 people from Icuácato, La Tirimicua, Sanambo, Caríngaro, Atzimbo, and Cutzaro were reporting to the civil register in Quiroga. The rancho or *barrio* of Cutzaro (it went by both terms) was the ancient little pueblo of San Miguel Cutzaro, a short distance to the north of Quiroga. By 1868 La Noria (an appendage of Atzimbo) had become populated. Some time between 1868 and 1873 Zirandangacho began

to appear in the Quiroga records. Either it had been depopulated for a period, or its inhabitants had been considered as dependent on Tzintzuntzan. Probably the boundary was highly uncertain, since in January of 1874 the people of Zirandangacho buried their dead in both Quiroga and Tzintzuntzan. The status of Atzimbo and El Tigre was also uncertain in 1874, since their inhabitants buried primarily in Tzintzuntzan but on occasion buried in Quiroga. In 1872 the rancho Irauco made appearance, and title to it was disputed between Sanambo and Icuácato until (by 1884) it was adjudged to be a part of the rancho Sanambo. By 1884 both Atzimbo and El Tigre had lost the title of hacienda, and there remained in the municipality of Quiroga of that period only the haciendas of Corrales, Sanabria, and Chapultepec, to the south and outside of our area of study. The apparent course of events in the ranchos portion of our area of study was as follows: (a) Sometime between 1736 and 1795 the northern portion of the hacienda of Itziparamuco reverted to Cocupao, which had merely rented the area to the hacienda, and the mestizo inhabitants of the ranchos of Icuácato, Caríngaro, and Sanambo took over the ownership as well as the cultivation of the surrounding lands; (b) the central zone was divided into the haciendas of El Tigre and Atzimbo which ceased to be haciendas prior to 1884, and Atzimbo was divided among its tenant farmers prior to 1870; (c) La Tirimicua and Cutzaro persisted as Indian-mestizo communities belonging to Quiroga; (d) the south and eastern entities of El Tigre, Atzimbo-La Noria, Zirandangacho, and La Tenería belonged to Quiroga in civil affairs, but to Tzintzuntzan in religious matters, which caused confusion in both fields. It should be pointed out here that the Quiroga region was never troubled by religious ownership of large properties, which was due principally to the fact that Franciscans and not Augustinians or Jesuits had controlled religious activity in the area. A short distance to the south, the east, and the northeast there were many haciendas and ranchos which were owned by the Augustinians or Jesuits at various times up to 1856 when all real estate was taken away from the religious.

The last period of the hacienda is often termed that of Porfirio Díaz because during his rule (1876-1911) an essentially new group of large

landholders developed in Mexico. However, in the general Quiroga region no new *latifundios* developed, although new names appeared among the owners of larger than average properties such as José María Arriaga and his son Francisco Arriaga for the haciendas Chapultepec and Corrales, José María Torres Ortiz who owned seven *caballerías* in El Tigre in 1889 which passed into the hands of Francisco Torres Mendoza in 1892, and Jesús Villanueva (native and resident of Quiroga) who owned the Hacienda de Sanabria as well as most of Zirandangacho, La Tenería, and Sámano. No foreigners were involved, although elsewhere in Mexico large estates were acquired by Spaniards, Italians, Frenchmen, Britishers, Americans, and Germans. The Ponce de León family did not lose out completely since we find that in the 1890's a Gregorio Ponce de León owned the Hacienda de la Lagunilla, and in Quiroga a Gerónimo Ponce owned most of La Tirimicua as well as several other good pieces of land. In 1910 there remained only the Hacienda de Sanabria (in the *tenencia* of Tzintzuntzan) within the municipality of Quiroga, since the haciendas of Chapultepec and Corrales had been transferred to Pátzcuaro earlier, and the haciendas of La Lagunilla and Quirínguaro were within Jesús Huiramba. However, on the north boundary of Quiroga there was an hacienda of colonial origin, the Hacienda de Tecacho of the jurisdiction of Huaniqueo. In 1822 the lands to the north of Icuácato, including the Malpais de Icuácato or Sajo, belonged to the Hacienda de Santa Catalina Tzintzimacato, and the Hacienda de Tecacho lay to the north and west. Some time prior to 1870 the Hacienda de Tecacho acquired Tzintzimacato and controlled most of the country from Capula and Teremendo to Huaniqueo. As late as 1907 Don Juan Landeta, owner of the Hacienda de Tecacho, owned the Malpais de Icuácato, Sajo, Tzintzimacato, and other lands in that region. During the period of the revolution the Hacienda de Tecacho lost its southeastern holdings, and the country to the north of Quiroga became the Hacienda de Sajo or Zajo belonging to J. Berruenco and his brothers. It was chiefly from this 7,000-hectare hacienda in the 1920's and 1930's that the *ejidos* of Teremendo, Sajo, Coro Chico, and Quiroga were obtained.

BOUNDARIES OF QUIROGA AND ITS RANCHOS

The municipality of Quiroga consists of the town of Quiroga, its six dependent ranchos, and the three western pueblos and their dependencies. The municipality, as such, never has had its boundaries surveyed or marked or delimited by law. Its entity is recognized as consisting of the *villa* and the three pueblos together with their lands. Consequently, the determination of the municipal boundaries rests on the identification of the boundaries of the constituent parts. We are not concerned with the two most western pueblos of San Andrés Ziróndaro and San Jerónimo Purenchécuaro excepting to state that they were dependencies of Erongarícuaro during most of the colonial period, primarily due to the influence of the Franciscan convent in Erongarícuaro. The *pueblo hospital* of Santa Fe de la Laguna has been a theocracy essentially from its founding by Don Vasco de Quiroga, in 1533-34 to the present time. Its Indian community or *Comunidad de Indígenas* weathered the period of the Reform Laws and that of the Pax Porfiriana better than did any other Indian community in Michoacán. As proof of this we cite the fact that the Santa Fe community owned 23 *caballerías* worth 18,000 pesos in 1889 (as compared with the value of 6,754 pesos for El Tigre at the same date), and in 1922 Santa Fe still owned 4,500 hectares valued at 151,590 pesos, which represents a drop in acreage but still a respectable acreage for community holdings that had not been benefited by *ejidal* grants. As has been mentioned, Santa Fe consistently won over Quiroga in any lawsuit pertaining to land boundaries. Apparently Copcupao never actually held or worked the lands in the western portion of her domain as outlined in the title of 1534. At the present time the slopes of Tzirate, all of the lands west of the Arroyo de Quiroga (also known as Arroyo de Cutzaro) as far down as the source of the town water supply (Las Cajas), the fields that border all of the western side of the town of Quiroga, and all of the fields west of the road (the former Calle del Muelle) that runs from Las Carreras to the lake, belong to Santa Fe. This means that the Cerro Huarapo









and all of the lake frontage fall within the domains of Santa Fe. Only two areas ever claimed by Santa Fe are now considered to belong to Quiroga town. One is the area of the former rancho of Sámano or Soamano which Santa Fe claimed as late as 1711, but which was possessed by inhabitants of Tzintzuntzan into the 1880's, and which came under the control of Quiroga through private purchase by citizens of Quiroga. The other area is the western portion of *cuarteles* I and II (to the west of a line drawn approximately north and south through the middle of the Plaza Vieja) which was purchased by the *villa* of Quiroga in 1861. This area (described as "Terrenos de La Fábrica, La Atzitzíndaro, y la Plaza Vieja") was divided as follows: The private lands remained in the possession of the original owners, but these landowners became citizens of Quiroga; and the public lands or commons became the property of the *villa* and were utilized for water supply (spring of Atzitzíndaro and Baño de Caballos) and for recreation (the Plaza Vieja became the Plaza de la Constitución, with trees planted and a fountain erected). Possibly the Villa de Quiroga still holds title to the abandoned quarry (La Cantera) on the slopes of Tzirate which was worked in the second half of the nineteenth century and to which a title was obtained. Although at present many citizens of Quiroga town own properties northwest of town, within Santa Fe area, no change in jurisdiction has been recognized. This condition has been perpetuated because the landholders of both Quiroga and Santa Fe inscribe their lands and pay their taxes in Quiroga.

The boundary between the municipality of Quiroga and the municipality of Tzintzuntzan is the most indefinite of all at the present time. This is because the parish of Quiroga was a vicariate of the parish of Tzintzuntzan until 1853, and because Tzintzuntzan was a part of the municipality of Quiroga from 1874 until 1930. So far as the municipality of Quiroga is concerned, the dispute is between the Villa de Quiroga and the Rancho de Patambicho; between the Rancho de Zirandangacho and the ranchos of Patambicho and Puerta de Cuenembo; between the Rancho de Atzimbo and the ranchos of Cuenembo, La Noria, and El Tigre; and between the Rancho de Sanambo and the Rancho del Tigre. In general, the boundary is now considered to be determined

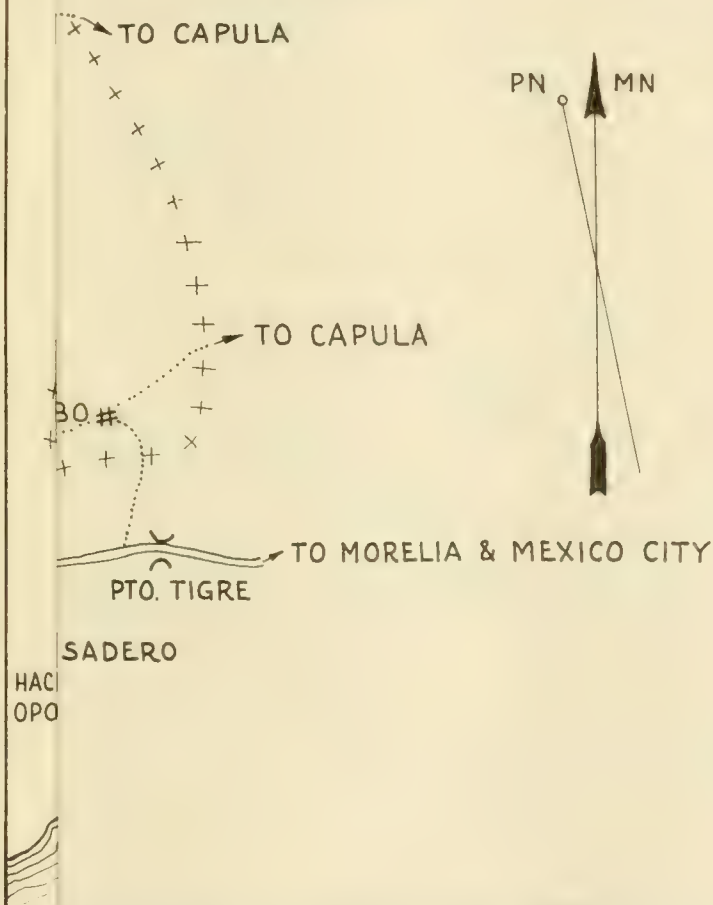
by the residence of the owners of lands in the disputed zone. The boundary as of the sixteenth and seventeenth centuries was presumably the Arroyo del Salto which flows into Lake Pátzcuaro near Patambicho. In the eighteenth century and up to 1880 Quiroga recognized that all of the lands from the very exits of Quiroga southward belonged to Tzintzuntzan. In the *actas* of the *ayuntamiento* in the 1870's there are such statements as: "the boundary of this town is the gate at the exit on the Calle Nacional"; "the limits are the Arroyo de Quiroga"; and "the Rancho Sámano of the jurisdiction of Tzintzuntzan." It should be mentioned here that the Arroyo de Quiroga formerly flowed southeast, along the very southern edge of Quiroga, to join the Arroyo del Cerro Azul just below the Abasto Viejo and the stone bridge on the road to Zirandangacho, but some years ago it was diverted at its exit from town through a channel cut so that it flows west to the Calle del Muelle and then along the boundary with Santa Fe until its scanty waters disappear in the herbage near the margins of the lake. Even today the term *Llano de Tzintzuntzan* is applied to all of the arable land in the lake plain outlined by the settlements of Quiroga, Zirandangacho, and Patambicho. However, the acquisition of the properties known as Sámano, La Tenería, Zirandangacho, San Diego, Tucurullo, etc., by citizens of Quiroga town (such as Gerónimo Ponce and Jesús Villanueva) since the 1880's has moved the boundary back to its early position along the Arroyo del Salto—at least so far as the tax collector's office is concerned. The local citizens are not in agreement as to the location of the southern boundary and are quite apt to mention the Arroyo del Cerro Azul or other boundaries. In the eastern sector of the Quiroga-Tzintzuntzan boundary the Arroyo del Salto is commonly accepted as the boundary line upstream as far as where the Mexico City-Guadalajara highway bridges the arroyo, but some of the local citizens insist that the true boundary runs a trifle to the west and roughly parallel to the stream and is defined by the traces of the now abandoned highway from Morelia to Tzintzuntzan and Pátzcuaro via Capula, Atzimbo, and the Puerta de Cuenembo. This same old road constitutes much of the boundary between the ranchos of Sanambo and El Tigre.

The remainder of the Quiroga municipal boundary is with the municipality of Morelia. In general

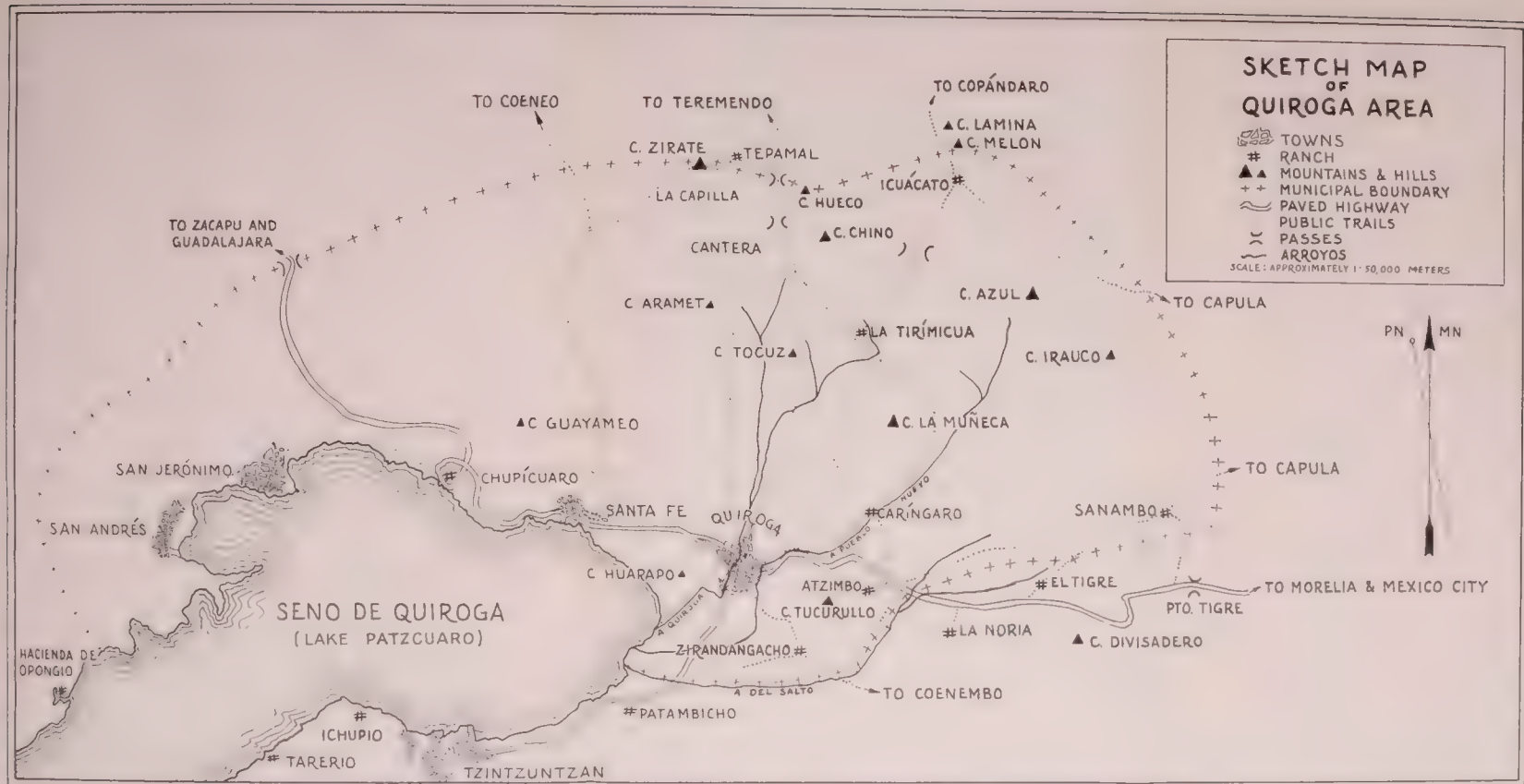
SKETCH MAP OF QUIROGA AREA

-  TOWNS
-  RANCH
-  MOUNTAINS & HILLS
-  MUNICIPAL BOUNDARY
-  PAVED HIGHWAY
-  PUBLIC TRAILS
-  PASSES
-  ARROYOS

SCALE: APPROXIMATELY 1:50,000 METERS



bits (indicated neither on the map nor on the trail to the highway, around the im- the Cerro Aramet to the eastern peak of i) indicate, respectively, a quarry and a



Map 3 - Sketch map of Quiroga area. This map is for general orientation purposes. As explained in the text, we were unable to use our survey instruments away from the highway near Quiroga. Therefore, most of the distances and relative positions are approximations. The air photographs shown in the folder can be understood better after consulting this sketch map. All towns within this municipio have been shown, and all settlements within the jurisdiction of Quiroga proper. Only the more important mountains and hills, arroyos, and trails have been indicated. Actually, there is a very complex network of trails, and the drainage pattern (like we in highly ramified). The lands of the A hills

de Quiroga occupy that portion of the municipio east of Santa Fe. The limits (indicated neither on the map nor on the land) run from the lake at the mouth of the Arroyo de Quiroga, along the trail to the highway, around the immediate western outskirts of Quiroga town, and then northward through the Cerro Aramet to the eastern peak of Tlatate. The two place names without symbols (Cantera and La Capilla) indicate, respectively, a quarry and a shrine on the slopes of Tlatate, neither of which is inhabited.

the local sectors of the boundary are between Sanambo and Capula (with Buenavista), and between Icuácato and Teremendo (with Sajo Grande). However, the agrarian community of Quiroga has its *ejido* in western Icuácato and the Malpais de Icuácato, and residents of Quiroga own and work the triangular area outlined by the peak of Tzirate, the Cerro Chino at the north edge of La Tirímicua, and the Cerro Hueco, so that probably the lands of the *villa* should be thought of as extending along the western sides of La Tirímicua and Icuácato to march with the lands of Teremendo (actually the dependencies of this *tenencia* of Morelia known as Aracurio, Sajo Grande, etc.). Since much of the Quiroga-Morelia boundary runs along a water-divide which is principally rough volcanic terrain with porous water-poor soils, there are no settlements very close to the boundary and there are but few cultivated fields or grazed pastures. Consequently, no one has been much concerned with the exact location of the boundary. This has been true since colonial times, and there is no record of a land dispute between Cocupao and Teremendo-Jaso excepting in the 1930's over *ejidal* grants.

The internal boundaries between the various ranchos, and between the ranchos and Quiroga are of comparatively little importance. Disputes, such as that in the 1870's between Icuácato and Sanambo over the Cerro Irauco, are quite rare. The long and acrimonious dispute between Quiroga and Atzimbo is discussed in connection with the Indian and agrarian community. In few instances were the inhabitants able to designate a precise marker or boundary between any two ranchos, although there is general agreement as to which entity any particular cultivated field belongs. In large part this is because the cultivated lands immediately surround the ranchos and diminish in use and value peripherally. Commonly wooded ridges separate one rancho from another (e. g., Zirandangacho from Atzimbo, La Tirímicua from Icuácato, Caríngaro from La Tirímicua and Icuácato, etc.), and the only cause for dispute would be over wood or pasture, or the few cultivated fields on the tops of the hills and mountains. The chief example of this circumstance is the cultivated top of the Cerro Azul, which seems to be cultivated by residents of Caríngaro, Icuácato, La Tirímicua, and Quiroga. In any case, the municipal council resident in Quiroga

has the power to determine the boundaries, and this can be done arbitrarily without the bloodshed that would ensue during and after an arbitration between two pueblos.

AREA OF MUNICIPIO

Since the separation of Tzintzuntzan from Quiroga the area of the municipality has been given as 82, 100, and 120 sq. km. These variations are pardonable in view of the lack of an integrated survey system, the lack of maps based on actual surveys, and the lack of agreement as to the boundaries. Nowhere is there an indication as to whether the lake area has been included in the above estimates. We would incline toward a figure of around 110 sq. km., excluding the lake portion. For the region of our study, Quiroga town and its ranchos, we would estimate 52 sq. km. or about 20 sq. miles (5,200 hectares or 12,849 acres).

SETTLEMENTS IN AREA OF STUDY

(MAP 3)

There are seven permanent settlements of census category within our area of study, namely, the Villa de Quiroga and the six permanent ranchos. In addition there are ephemeral settlements consisting of three or four huts apiece which usually have a life of only a few years—just long enough to exhaust the ground or the patience or pocketbook of the landowner. Such settlements usually leave behind them little more than a name, such as the fields of Tucurullo which sometimes are termed Rancho de Bartolo Sierra after a Quiroga merchant of the middle of the past century who once owned the land and maintained some laborers there. In 1944-46 there was only one such *ranchito* (El Tepamal or Rancho de la Soledad), and that was on marginal lands that probably belong to Teremendo.

RANCHOS

ICUÁCATO

San Antonio Icuácato is 6 miles by footpath northeast of Quiroga, at an elevation of 2,390 meters. It is the second highest and second most distant of the ranchos. Icuácato lies in a small basin nearly surrounded by hills and mountains (Cerro Melón, Cerro Irauco, Cerro Azul, Cerro

Chino, and the Malpais de Icuácato), and is drained by four barrancas that cross the settlement and then unite to form the Arroyo de Icuácato, which flows out of the basin between the Cerro Melón and the *malpais* to die away in the inclosed basin of the Plan de Sajo Grande. Deforestation, erosion, and poor porous soils make this basin settlement a submarginal area. Despite two artificial ponds and several wells and sumps, there is no permanent supply of water. Each year for a period varying between a few weeks and several months the inhabitants must haul their water by pack animal from the wells at La Tirimicua, $3\frac{1}{2}$ miles away. Although the main highway from Pátzcuaro and Quiroga to Chucándiro passes through Icuácato, and minor roads lead to Capula and Sanambo, there is no passage for other than pedestrians and pack animals on any road connecting Icuácato with the outside world. The rancho is bounded by (going clockwise from the north) the *ejido* of Quiroga, the *ejido* of Teremendo Jaso, Capula, Sanambo, Caríngaro, and La Tirimicua. The earliest mention is in the 1534 title of Cocupao where it is designated as San Juan Ucuato, and next when it was congregated in 1603 with Jaso (Xaxo) and Teremendo under the name San Juan Bautista Yucucuat. Other early variants of the name are Ucuacato and Hicucacato. When the site was reoccupied by tenants of the Hacienda Itziparamuco (date uncertain, and probably through a rental agreement either with Cocupao or Teremendo Jaso) the name took the modern form of San Antonio Icuácato. There is a modern chapel dedicated to San Antonio de Padua in which masses are said once a year by the curate of Quiroga. The Tarascan name is said to mean "where they bathe" (*donde se bañan*), which is ludicrous in view of the extreme scarcity of water. In recent years the population has ranged between 50 and 60 families who inhabit 46 of the 51 houses (1945 census) in the community. The total population was 268 in 1945; 249 in 1940; 239 in 1930; 195 in 1921; and 221 in 1900. In the 1860's and 1870's, and again from 1914 to 1928, the area was used as a hideout and headquarters for local guerrilla, bandit, Cristero, revolutionary, and other partisan bands. There is no school and all but 2 of the inhabitants are illiterate. There is no store, and there is no occupation other than farming, supplemented by some woodcutting and

charcoal burning. In 1945 there were 1 charcoal burner, 4 *arrieros*, 5 landless *peones*, and the rest were farmers. Nearly all the heads of families own the *solar* upon which their house is built, and parcels of agricultural land of various sizes. The majority are *agricultores propietarios* (farm owners), some are tenant farmers (*medieros*), and a few are landless farm laborers. The principal named areas or fields in which they have their parcels of cultivated land are: El Aguacate, El Capulín, Cerro Azul, Cerro Melón, El Corral, Ecuaro, El Jabalí, El Jazmín, La Joya and La Joyita, La Laja and Las Lajas, Llano Blanco, Los Llanitos, El Madroño, Las Mesitas, La Morera, La Piaña, Piedra de la Luna, Los Pocitos, and La Presa, most of which are within three comprehensive areas known as El Plan de Icuácato, Cerro y mesas del Melón, and El Llano Blanco. The 36 farmers of the rancho plant principally maize (all 36 farmers), *habas* or broadbeans (30 farmers), wheat (23), kidney beans (14), and pumpkins (7). There are no other field crops. In an average year the residents of Icuácato sow 1,865 liters of maize, 5,825 liters of *habas*, 1,825 liters of wheat, and 201 liters of beans. The average or typical farmer plants 50 liters of maize, 200 liters of *habas*, and 80 liters of wheat. Despite the paucity of water there is enough pasture and browse to support a fairly large livestock population. Around the houses are kept 479 hens, roosters, and pullets, and 59 turkeys; all but two families keep poultry. Also near the houses are 141 beehives, owned by 18 families. Ranging around the houses and throughout the settlement were 160 pigs, owned by 38 families. About a dozen families owned 274 sheep and 41 goats, which normally ran together. At the time of our census there were 57 cows, 48 calves, 4 bulls, and 109 work oxen, together with 37 burros, 29 horses, and 1 colt. To finish the picture there should be mentioned the 96 dogs (owned by 43 families) and 43 cats (in 27 houses).

Other than in the dry season, Icuácato presented a pleasing scene with the houses distributed irregularly over the slopes broken by the four arroyos, and with a few houses built on the margin of the lava flow at the northwest side. Each house was surrounded by a fairly large *solar* which provided space for a yard or patio, a small plot for maize or beans, and scattered ornamental and fruit trees, shrubs, and herbs. The distribution

of the houses was conditioned by the terrain principally, and the dirt roads or alleys wound around so that every house had an exit onto a public road. There were no *cuarteles*, *barrios*, streets with names, or houses with numbers. To find a given person or house it was necessary to use a guide. Although only 4 houses had what might be termed a flower garden, about 40 of the houses had a scattering of flowering plants which testified to the loving care of the women who had to pack the water for the plants as well as for the household. The most popular flowers were, in order, various kinds of "geraniums," rue, roses, carnations, petunias, and herbs popular in folk medicine. There were no truck or vegetable gardens, but about a third of the families cultivated a few *chayote* and chile plants near the houses. Neither were there any fruit orchards, but scattered fruit trees constituted the chief source of ornament and shade in the community. Peaches dominated, with 184 trees scattered over the *solares* of 42 houses; and the other introduced trees were 4 quinces, 2 pears, 2 cherries, and 1 mulberry. Agaves led the list of native plants, and 97 of these *magüeyes* punctuated the landscape, along with 65 hawthorns (*tejocotes*), 50 clumps of cultivated edible cactus (*nopal manso*), 48 native cherries (*capulines*), and but 1 white zapote. The more common of the purely ornamental trees and shrubs were 50 oaks, 22 large yuccas, 16 ash trees, and a scattering of elder, pine, cypress, floripondio, and tree tobacco, down to a lonely eucalyptus planted by the chapel.

All the houses are of one story and are made of local materials. Hewn pine planks, unshaped stone, and sun-dried adobes are the materials used in the walls (31 houses of plank walls; 9 of plank and stone; 4 of plank and adobe; 1 of plank, stone, and adobe; and 5 of stone—of the 50 houses other than the chapel, whose walls are constructed of plank, stone, and adobe). Only 6 of the 46 inhabited houses were whitewashed. The roofs are commonly of grass thatch (28 of grass; 12 of grass and tile; 3 of grass and shakes; 6 of tile; and 1 of tile and shakes) arranged in two slopes (*dos aguas*) from a center ridgepole (42 of the houses), but 8 houses approximated the presumptive ancient form with four slopes from a central peak. Ten of the houses were of the Sierra Tarascan *troje* type in general appearance, but only 4 had the typical *tejamanil* or shake

roof. The houses ranged from 1 to 7 rooms (1 house), but 24 had but 2 rooms, 11 had 3 rooms, and 9 had but 1 room. Usually there were as many exterior doors as there were rooms, and only 2 houses had windows (1 with 1, and another with 2), which were small rectangular openings without glass. The floors were principally of earth (29 houses), although 19 houses had wooden as well as dirt floors, and 2 houses had only wooden floors. There were no privies or backhouses of any description. There is no piped water, and all of the water is packed in *ollas* or jars from the several wells and sumps, as long as these have water. Most of the people sleep on *petates* (mats) on the floor, although 10 families possessed a total of 12 wooden beds which were used in addition to *petates*. The only fuel used is *leña* (cut sticks) in the open hearths or cooking places. Twenty-three families used pitch-pine splinters or *ocote* for lighting, 16 families could afford kerosene (*petroleo*) in lamps, 4 households commonly used candles, and 3 families relied on the light from the cooking fire. In all the rancho there was no radio or even phonograph, and but 2 hand sewing machines. In all Icuácato there was no wheeled vehicle, excepting 1 small handcart. All of the above describes a poor but rather typical isolated Michoacán rancho.

SANAMBO

In most respects San Diego Sanambo was the superlative rancho, being farthest from Quiroga, largest in area and population, and highest in elevation. Its location on the rather steep slopes that descend from the base of the Cerro de Sanambo (Cerro de Buenavista) to the hanging valley of El Tigre-Caríngaro-Atzimbo-La Noria, at a mean elevation of 2,450 meters, affords a magnificent view southwest over the northern portion of the lake basin. Most of its lands occupy the middle crests and slopes of the undulating ridge which extends eastward from El Tzirate through the Cerro Chino, Cerro Azul, and Cerro Irauco, toward Capula and then bifurcates toward the Cerro del Aguila and the Cerro Quinceo. Like Icuácato, deforestation and erosion, together with the elevation which throws all of it into the *tierra fría*, have made Sanambo a submarginal area, but the soils are somewhat more retentive of moisture and there are a number of permanent springs and artificial ponds (*jagüeyes*). Although between 6

and 7 miles due east from Quiroga by foot trail, Sanambo is only about a mile from the paved highway (Mexico City to Guadalajara) which curves northward to pass through the Puerto del Tigre. Numerous trails connect Sanambo with all of the communities in the area, and the former main highway from Morelia to Tzintzuntzan passed through Capula (about 4 miles distant), Buenavista, Sanambo, and El Tigre. The rancho is bounded (going clockwise from the north) by Buenavista, Iratzio, El Tigre, possibly a little of Atzimbo, Caríngaro, Icuácato, and Capula. The earliest mention of Sanambo is its listing (as Sanabo and Zanambo) in 1569 as part of the *doctrina* or parish of Tzintzuntzan, although the Loma Guatzivet chagarricu and the Monte Yraocojuato of the 1534 Cocupao *título* fall within or on the boundary of Sanambo. The first mention as a pueblo is in connection with the 1603 congregation when it is mentioned with Zirandangacho under the name Tzanambo. It reappears as a rancho in the eighteenth century and has maintained its identity under the forms Sanambo and Zanambo. This name has two locally accepted etymologies: (a) from *xanambo*, place of *xanamu* (a type of reddish vesicular lava used in masonry); and (b) from *sanango*, place of *sanaga*, a cocoon common on madroño trees in the area. Sanambo possesses the largest chapel of any of the ranchos, erected early in this century and said to be dedicated to the Sagrado Corazón de Jesús. This would imply that San Diego or Santiago was the titular saint of the original pueblo, whose name is still remembered in the area.

The population has remained rather static, although a gain was registered in 1945 over the figures for 1900, which was true only for Icuácato and Sanambo among the ranchos. The population has been 299 in 1945; 286 in 1940; 326 in 1930; 307 in 1921; and 259 in 1900, throughout which period it was the most populous of the ranchos. In 1945 there were 61 families living in 49 of the 52 houses in the settlement. The settlement composes an inverted L shape which centers on the main springs and adjacent chapel. The waters of these strong and good springs are now concentrated in concrete basins or *pilas* which were constructed in the 1930's. The waters of Sanambo had such a good reputation that during the second half of the nineteenth century and until the revolution there was a rum factory here, which has given rise to the name of La Fábrica for the plot or *predio* where

the distillery was situated. There is no school in Sanambo, and only 6 of the inhabitants are literate. Neither is there any store except a *tendajón* kept in the house of one of the farmers, nor other enterprise besides those connected directly with farming. In 1945 there was one *batellero* (maker of crude wooden bowls), six families of landless agricultural workers or *peones*, and the remainder were farmers all of whom owned their house site or *solar* and the fields that they cultivated. The 38 active farming households all planted maize (2,699 liters each year); 30 also planted wheat (2,144 liters); 19 planted *habas* (890 liters); 10 planted barley (505 liters); and 15 planted kidney beans (125 liters). There were no other cultivated crops, excepting occasional interplanting of pumpkins with maize and beans. The principal cultivated fields or areas within the rancho are El Albaricoque, Barranca de los Chávez, La Campanilla, La Capilla, El Capulín, Los Capulines, La Casita, El Cerrito, Cerro Chiquito, Cerro de Irauco, Cerrito de Sanambo, El Corral, La Cuesta, El Desmonte, El Encinal, La Estacada, La Fábrica, La Fábrica Chica, El Fresno, La Humedad, El Jagüey, La Loma, El Madroño, Mesa de Pineda, Las Mesitas, Pila de la Guare, El Pinabeto, El Salto, and San Rafael. Livestock consisted of 169 work oxen, bulls, cows and calves; 32 horses and 9 burros; 40 pigs; 20 sheep and no goats; 14 turkeys and 6 pigeons; 222 hens, roosters, and pullets; and 47 dogs and 22 cats.

Sanambo, like Icuácato and all the other ranchos, has no formal subdivisions such as *barrios* and blocks, nor any named streets or numbered houses. However, the pattern of settlement is the most closely knit of any of the ranchos, and Sanambo and Caríngaro are the only ones of these communities which have anything approaching a center—in the area of the chapel and the main springs. The 51 houses and the chapel are all of 1 story, and 49 of the houses are inhabited by 61 families. Although 26 of the houses had walls constructed of wooden planks or split logs there were 13 that combined adobe and planks, 3 that were entirely of adobe, 3 of adobe and stones, and 6 of more varied materials. Somewhat greater attention to appearances was manifested by the fact that 14 of the houses had the walls whitewashed or plastered with mud. Grass thatched roofs were in the minority (only 8 of grass alone or in combination with tile or

shake), while 29 were of tiles alone, 5 of shakes alone, and 9 of tiles and shakes. The roofs of all the houses were of *dos aguas* excepting 5 which had a shed roof over part of the structure. The number of rooms varied from 1 to 9 (1 house), but most of the houses were of 2 (19), 3 (16), or 4 (10) rooms. The floors were about evenly divided among dirt (19), wood (15), and a combination of dirt and wood (15); and 2 had brick floors. There were 4 houses which approximated the Sierra *troje*, but these had tile instead of shake roofs. The number of doors varied from 1 to 9 (1 house), with 2 (22 houses) and 3 (14 houses) being most common. Wood-shuttered windows were found in 9 of the houses. All of the houses had a yard, but there were no fruit orchards or flower gardens, and only in the 27 exterior house plots on the upper periphery were there small seed plots or *sementeras*. As in all of the ranchos, there was a scattered planting of fruit and ornamental trees, of which the most common were: 160 peach trees, 22 *capulines*, 17 cactus clumps, 16 *tejocotes*, 15 agaves, and 14 ash trees, as well as a few white zapotes, avocados, quinces, pears, cypresses, etc., including 1 eucalyptus. The most common flowers in the house plots were various types of "geraniums," rue, *belenes*, *bichis*, and lilies, and there were 3 bougainvillea shrubs. About a third of the households had a few *chayote*, chile, and tomato plants. Domestic water supply was about evenly divided between water carried from the main springs for the lower part of Sanambo, and water taken from a wooden flume in the upper rancho. As was true for all of the ranchos, there were no privies. Wood constituted the only fuel for cooking, while 17 households used pitch-pine splinters for illumination, 16 used *petroleo*, and the remainder varied among pitch-pine splinters, *petroleo*, and candles. Although there were no radios or phonographs, there were 11 hand sewing machines, 4 carts, and 1 hand cart. Most of the families (30) possessed at least 1 wooden bed, although 18 used only floor mats, and there was 1 iron camp cot.

CARÍNGARO

San Miguel Caríngaro is a small but disperse rancho perched on a rough, rocky, eroded and steep terrain, about 2 miles by trail east-northeast of Quiroga, and 1 km. west of the paved highway near the crest at Atzimbo. The lands occupied by

this rancho are mainly the slopes that descend from the Cerro Azul, streams from which concentrate in and just below Caríngaro to form the Arroyo del Cerro Azul (also known as the Arroyo de Caríngaro, Arroyo de las Tinajas, etc.). The main part of the rancho is located around the spring which comes out of the rocks at a point where the steep rocky slopes intersect a small bench of gently rolling surface. At this point, with an elevation of 2,220 meters, there is a water basin and watering trough of concrete (constructed in 1939), and nearby is the chapel of San Miguel Arcángel built in 1880. The open space between the spring and the chapel affords a near approach to a plaza, but the main activity here is getting water, washing clothes, and gossiping. Just below the chapel, and on the banks of the main arroyo, are the ruins of the *fábrica* which distilled a high quality rum up to about 1918. Foot trails connect Caríngaro with Sanambo, Icuácató, La Tirfmicua, Quiroga, and Atzimbo, which are the surrounding entities. The first mention encountered of Caríngaro is as a rancho in the eighteenth century, although the profusion of *tepalcates* or potsherds over the slopes above the spring and the settlement indicate a prehistoric occupation of the area. The only form of the name known is Caríngaro, which has been interpreted to mean "very dry place," "sterile place," and "place of hunger or want"—any of which terms would describe the general area quite well.

The population has been consistently small: 74 in 1945; 64 in 1940; 72 in 1930; 61 in 1921; and 109 in 1900. In 1945 there were 14 families, occupying 12 of the 14 houses in the community. There is no school, and there is but 1 literate person in the community. There is no store, not even a corner *tendajón*. The inhabitants are purely agricultural since all 12 households plant crops, although 2 or 3 do not own the lands they cultivate, and 1 man combines the occupations of farmer, *arriero*, and *calero* (dispenser of lime used in preparing maize for tortillas). The chief crops planted are maize (345 liters a year, by all households), wheat (310 liters by 6 families), *habas* (337 liters by 6 families), and kidney beans (76 liters by 10 families). Commonly no other crops are planted. The principal named fields or cultivated areas in Caríngaro are La Joya del Plan Grande, Agua Escondida, El Capulín, La Cueva, La Espiguilla, and El Fresno. As usual, hens,

roosters, and pullets lead in numbers with a total of 60; and there is 1 turkey. There are 16 cows, 20 work oxen, 1 bull, 18 calves, 4 horses, 6 burros, 11 pigs, 52 beehives, 15 dogs, 8 cats, and no sheep or goats.

The houses, perched on rocky ledges or located on ridges between arroyos, are connected by the merest of footpaths, excepting for those situated along the main traces from the *pila de agua* and the chapel to the highway. All 15 of the structures in Caríngaro are of 1 story and *dos aguas*, and none has windows excepting the chapel, which has 5. Wood, stone, and adobe are the chief wall materials (5 houses with walls of wood and adobe, 3 of planks alone, 2 of adobe alone, 1 of stones, 2 of wood and stone, and 2 of wood, stone, and adobe). Thirteen of the buildings are either whitewashed or have been mudplastered. The principal roofing material is tile (11 houses), and the others are combinations of tile, shake, and grass. Three houses approximate conventional wooden *trojes*. The houses vary from 2 to 4 rooms, but 9 houses have only 2 rooms. The flooring is of earth in 9 houses, of earth and wood in 5, and 1 house has a brick floor. Doorways range from 1 to 4 in number, with 10 houses having but 2 doors. All of the houses have small yards, but the *solares* are so small and rocky that only 5 of the better situated ones have associated *sementeras*, and 1 of these has a *huerto* or small orchard. Owing to situation at a lower elevation than Sanambo and Icuácató, and in *tierra templada*, there is a greater variety in fruit and ornamental trees and shrubs, although the number is small. The chief elements are 34 agaves, 29 peach trees, 17 *zapote blanco*, 17 *chupire*, 10 castor-bean shrubs, 9 *tejocotes*, and 9 ash trees, with a sprinkling of yuccas, cactuses, *chirimoyas*, avocados, oaks, *capulín*, willow, quince, etc. Two of the houses have flowers in *macetas* or flowerpots, and all of the others have at least a few flowers among which the most common are "geraniums," *castillos* (an introduced African mint that has gone wild), rue, roses, and tree tobacco. Two families raise a few chile peppers. All water is obtained from the central *pila* at the spring. The only cooking fuel is wood, and illumination is chiefly *petroleo* (6 houses), *ocote* (3 houses), and combinations of candles, pitch pine, and kerosene in the other 3. Eight families sleep only on mats, and 4 households have both *petates* and wooden beds. There are 3 hand

sewing machines in the rancho, but no radios, phonographs, carts, or any other type of wheeled vehicle.

LA TIRÍMICUA

The rancho of La Tirímicua differs in a number of respects from the other ranchos. Probably it never was a part of the Hacienda Itziparamuco or Hacienda Atzimbo, and its population (although mestizo) is more Indian than that of the other ranchos. Like Caríngaro and Atzimbo, it was never mentioned as a pueblo, but there has been a very close contact between La Tirímicua and Quiroga since time immemorial. Until the 1880's most of the lands in La Tirímicua belonged to Indians of Quiroga, and a number of members of the Comunidad de Indígenas de Quiroga still own lands in the area. During the 1890's Gerónimo Ponce of Quiroga bought the titles or *escrituras* of property in La Tirímicua from some 30 members of the Indian community; in 1907 he deeded his La Tirímicua property to his 2 sons Luis R. Ponce Estrada and Jesús Ponce Estrada; and in 1941-42 their heirs sold these lands to Diego Fuentes Aguilar and his wife Mercedes Rodríguez Sánchez (natives of Quiroga) who still possess them. During the past 40 years these lands have been estimated at areas ranging from 60 to more than 250 hectares, and have been valued at 6,000 pesos (1907), 21,700 pesos (1937), and 13,450 pesos in 1945. The rancho, as consolidated by Gerónimo Ponce and his successors, is essentially the possession of one family since all the other holdings in the rancho area are not valued at more than about 8,000 pesos, and these holdings are mainly on the periphery. Most of the inhabitants of the settlement own the *solares* upon which their houses are built, but they are all either renters of or workers for the Fuentes. This condition obtains elsewhere only in the rancho of Zirandangacho, most of which is owned by two families. Being but an appendage of Quiroga, and without resident landowners, the rancho never has had a chapel or a patron saint. It is possible that, during the early sixteenth century and before any of the congregations, there was an Indian *pueblito* on the mesa a few hundred yards northwest of the present community. There are the remains of a *yácata* on the southeastern tip of this Mesa de Santiago, and potsherds and artifacts are to be found weathering out over most of the surface of the mesa. Possibly

here was one of the several fugitive Santiago pueblos which cannot be located from historical records or tradition.

La Tirímicua is situated in a hanging valley, at an elevation of 2,350 meters, about 2.6 miles north-east of Quiroga. The actual settlement straddles the depression or *joya*, between the Mesa de Santiago and an outlier of the Cerro Azul, through which waters pass on their way from the valley through a precipitous barranca to become the eastern affluent of the Arroyo de Quiroga. The best lands are in the Joya and Plan de Tirímicua, within the valley, but cultivation is carried on over the Mesa de Santiago, and the slopes of the Cerro Chino, Cerro de la Pulga, La Pulguita, Cerro Azul, and Cerro de la Muñeca, which surround the valley. The name of the rancho is derived from four shallow wells of sweet cool water located a few rods upstream from the settlement. *Tirímacua* means either "in the well of water" or "the wells." During the dry season these wells of Tirímicua must supply not only the residents of La Tirímicua but also those of Icuácato and El Tepamal, and there is barely enough water for drinking, cooking, watering animals, and laundering. As a consequence there has been no development of irrigated crops in the Joya de Tirímicua. Because of the restricted ownership of lands the population apparently never has been very large in modern times. It was 98 in 1945; 88 in 1940; 87 in 1930; 55 in 1921; and 101 in 1900. The community consists of 19 families who live in 17 house groups. All of the heads of family are tenant farmers or sharecroppers (*agricultores medieros*) excepting two recently arrived *peones* and one woodman or *leñero*. The crops planted in 1945 were: maize (544 liters by all 14 tenants), wheat (930 liters by 11 farmers); *habas* (585 liters by 7 farmers), and kidney beans (36 liters by 3 farmers). According to our 1945 census there were 80 hens, roosters, and pullets; 17 turkeys; 32 pigs; 81 sheep and 1 goat; 9 horses and 9 burros; 12 cows, 2 calves, and 25 work oxen; 21 beehives; 22 dogs, 8 cats, and 1 pet rabbit. However, we are positive that many rented animals (work oxen) and animals run on shares (cows, sheep, and goats) were not included in these figures for fear that we were some sort of assessors or tax collectors who might include such animals in their personal property. As it was, 51 of the sheep, 5 of the cows, and 6 of the beehives were listed as "on shares" (*a medias*), and 18 of

the work oxen were "rented." From our own observations it is certain that there were many more animals than listed above, especially sheep, goats, cows, and turkeys. This lack of confidence was not noticed in the other ranchos where the farmers were owners of both land and livestock. The chief areas farmed in La Tirímicua go by the names of Agua Azul, La Cañada, La Capilla, Los Conejos, La Joya, La Ladera, La Mantequilla, Mesa Chica and Mesa Grande de Santiago, El Plan, La Pulguita, La Pera, La Ringlera, El Sumbido, and Las Víboras.

The houses of the settlement are in two groups separated by the highway (only a burro trail) which goes from Quiroga to Chucándiro through La Tirímicua, Icuácato, and Sajo Grande. On the slopes of the Mesa de Santiago is the two-story ranchhouse of adobe walls and tile roof, and an accompanying *jacal* or barn. One renter, the mayordomo for the landlord, occupies the ranchhouse, and 15 other households are in the same area, arranged in a fairly rectilinear pattern. On the other side of the arroyo and highway is 1 household in three 1-room Sierra-type *trojes* with a separate kitchen house or shed, and there is 1 unoccupied *troje*. All of the houses excepting the ranchhouse are of 1 story, and all but 5 *trojes* with 4 roof slopes have roofs of *dos aguas*. The *trojes* are built of planks, and the remainder are a hodgepodge of adobe, stone, and wood walls, with roofs of tiles or grass thatch, and floors of tamped earth. Two-room houses predominate, with either 1 or 2 doors and no windows. About half of the houses are whitewashed or mud-plastered. The settlement area is dusty, grown over with wild composite shrubs and hoarhound, and relieved of its barren appearance only by its setting. Cultivated vegetation is scarce in the settlement, there being only 44 peach trees, 6 *capulines*, 3 ashes, 3 *tejocotes*, 3 agaves, several willows by the wells, 1 magnificent yucca, and a few other trees and shrubs. Because of its position in *tierra fría* there are no *chupires*, *colorines*, castor-bean shrubs, or bougainvillea to add vivid greens and reds to the vegetation color. A few women keep some flowers in *macetas* (chiefly 5-gallon kerosene cans), and these are mainly "geraniums." As mentioned, all of the water comes from the wells. Cooking fuel is principally oak sticks, with some pine wood and the occasional use of corncobs. Five households use

kerosene, and the remainder commonly use *ocote* for lighting. All sleep on floor mats. There is but one cart in the community since all the roads are but foot trails to Icuácato, El Tepamal and Teremendo, Quiroga, and Caríngaro. There are no radios or phonographs, nor even one sewing machine in La Tirímicua. It has no store, *tendajón*, school, or other type of building or enterprise not connected with agriculture. There is but one literate person in the community. As a sideline in the "off-season," the men do cut wood, burn charcoal, transport water and wood and charcoal, cut *zurumuto* (a grass used for thatching and packing), gather Spanish "moss" and *tabardillo* (a composite) for use in packing pottery and woodwork in Quiroga, elaborate crude wooden bowls used in the lacquer industry in Quiroga, hunt squirrels and rabbits, and gather *capulín* and *tejocote* fruit in season. In general this rancho is *muy triste*—very sad or depressing.

ATZIMBO

The rancho of Atzimbo is probably the most prosperous and most sophisticated of the ranchos belonging to Quiroga. Possibly this condition derives from the fact that Atzimbo is the oldest *puesto* or rancho developed within that portion of the Hacienda de Itziparamuco which now belongs to Quiroga. However, the factors influencing the original selection of the site (good soil, fairly good water supply, location on a road from Valladolid to Tzintzuntzan and Pátzcuaro, etc.) probably have been of the greatest importance. The present settlement of Atzimbo is located on a bench or mesa which slopes to the east and south from the Cerro de Tucurullo (Cerro Jorullo, etc.) toward the once fertile Plan and Joya de Atzimbo which constitute the lowest portion of the hanging valley occupied by the headwaters of the Arroyo del Salto. In the past generation or two, denudation and erosion have deepened the channel of the arroyo upstream from the falls or El Salto so that in the heart of the *joya* the channel has cut some 20 feet through alluvium and decomposed volcanic ash to reveal the rubble of an old volcanic flow. Also, channeling and denudation have stripped the arable soil from large areas along the mesa margins, leaving a "badlands" of infertile *tepetate*. The lands claimed by Atzimbo march with those of Caríngaro, Sanambo or El Tigre, La Noria, Cuenembo or Puerta de Cuenembo,

Zirandangacho, and Quiroga. The paved highway from Morelia passes just a quarter of mile to the north of the settlement, and along this highway it is about 2.5 miles west-northwest to Quiroga town. The old road from Morelia to Tzintzuntzan, which passes along the east side of the settlement, is still used as a trail to the Puerta de Cuenembo and other settlements to the south, and ramifications north and east from the old road lead to Caríngaro, Sanambo, El Tigre, and La Noria. The elevation of the rancho on the mesa is 2,230 meters, which places the entire area within the *tierra templada*.

Atzimbo first appears in records as a *puesto* of the seventeenth century Hacienda de Itziparamuco, under the name San Bartolomé Atzimbo. By some time in the eighteenth century the area of the present rancho was converted into the independent Hacienda de Atzimbo. This hacienda came into the hands of its tenant farmers some time in the nineteenth century, prior to 1870. During the latter half of the nineteenth century and until 1908 there were frequent conflicts between the Comunidad de Indígenas de Quiroga and the *parcioneros* of the hacienda and ex-hacienda of Atzimbo over lands along the banks of the Arroyo del Cerro Azul, from La Tepóricua up stream through the area known as Las Tinajas and extending northward up the slopes of the Cerro de La Muñeca (Cerro de la Mina, etc.). In 1908 the dispute was settled by dividing the disputed area equally between the two parties. As mentioned previously, Atzimbo has had mixed relationships with Quiroga and Tzintzuntzan, and although now it is definitely a part of the municipality of Quiroga in all civil matters and buries its dead in the Quiroga cemetery, it is still nominally included within the parish of Tzintzuntzan. The chapel in Atzimbo is one of the oldest in the area, and it possesses two bells one of which dates from 1825. Although known throughout its colonial history by the name San Bartolomé Atzimbo, at present there is much uncertainty in Atzimbo as to the patron saint and some say that it is San Isidro—the patron saint of farmers. The name Atzimbo has been derived from two sources: (a) from Atzimba, the legendary sister of the last Tarascan ruler, who presumably owned all of the area, and (b) from *Atzimu* (*lugar lodoso*), meaning place of mud or clay. The first derivation seems to be the better.

The population of Atzimbo evidently was much depleted during the period of the revolution, and it has not yet regained the numbers or relative position it held (second largest of the ranchos) in 1900. The population was 207 in 1945; 179 in 1940; 159 in 1930; 142 in 1921, and 228 in 1900. In 1945 there were 41 families living in 36 of the 44 houses in the settlement. This rancho occupies the most even terrain of any of the settlements, and is laid out in an open or disperse fashion with large *solares*, and there are cultivated fields between many of the houses. The chapel does not constitute a center for the rancho and there is no important spring of water to condition the settlement pattern. Most of the households obtain water from the several shallow wells in the community, and but three get water from the small springs near the arroyo. There is no school at present in Atzimbo, but a private school for boys was in existence in the 1880's and possibly continued until the revolution. According to our census of 1945 there were no literate adults in Atzimbo, but the literacy census of 1945 reported 70 individuals above the age of six who could read and write. There is no store, but one of the farmers keeps a *tendajón* in his house. Practically the only occupation is farming, and all of the heads of household are *agricultores* who own both *solares* and farm lands excepting one woman (with no stated occupation excepting household chores—*quehaceres*) and one farm laborer or *peón*. Because of consolidation of certain family groups in working the farm land there are but 30 listed active farmers. In 1945 all 30 planted maize (1,553 liters), 27 planted wheat (2,508 liters), 28 planted kidney beans (498 liters), and eight planted *habas* (341 liters). Livestock are not numerous but comprise 366 hens, roosters and pullets, and 31 turkeys; 119 cows, calves, work oxen, and bulls; 65 sheep and 4 goats; 38 pigs; 20 burros and 16 horses; 42 beehives; and 43 dogs and 25 cats. Apparently Atzimbo is the one rancho in which there is some attempt to raise fighting cocks. The principal areas of cultivation are named La Joya and El Plan de Atzimbo, La Alameda, El Capulín and Los Capulines, El Desmonte, Los Durazos, El Encinal, La Espiguilla, El Fresno, El Granjeno, La Loma and La Mesa de Atzimbo, Los Magueyes, Los Nogales or El

Tucurullo, El Salto, El Cerro de Tucurullo or Joturullo, San Antonio, and San Ignacio.

The settlement proper consists of 44 houses and the chapel. All the houses are of 1 story and with roofs of *dos aguas*. The house walls are principally of planks or split logs with some use of adobes (33 houses), 6 are adobe, and 5 are of wood; and the roofing material is tile in 40 of the houses. Rooms vary in number from 1 (3 houses) to 5 (2 houses); there are 16 houses with 2 rooms, 11 with 3 rooms, and 13 with 4 rooms. Flooring is of tamped earth and wood in 21 houses, earth alone in 19 houses, wood alone in 4 houses, and bricks in the chapel. All but 11 of the buildings are whitewashed or mud-plastered. Between 5 and 9 of the houses approximate the Sierra wooden *troje*. Most of the houses have 2, 3, or 4 doorways, and 8 houses have wooden-shuttered window openings. All of the houses have ample *solares* with yards; 16 have associated *sementeras*; 5 have small fruit orchards; and 3 households raise a few *chayotes* and chiles. Ten of the households raise flowers in regular pottery flowerpots, and all of the others have a variety of flowering plants in the yards. The most popular flowers are "geraniums," roses, rue, *belén*, and carnations. The chief fruit trees and shrubs are 152 peaches, 51 cactus clumps, and about 40 agaves, 34 *tejocotes*, and 18 white *zapotes*. The chief shade and ornamental trees and shrubs are 51 *colorines*, 35 yuccas, 21 ash trees, and 11 oaks. An indication of lower elevation and warmer winters is to be found in the considerable number of *colorines*, cactuses, yuccas, and *zapotes*, as well as the only *cosahuates*, and Peruvian pepper trees found in the ranchos. Oak and pine wood constitute the only fuel for the house fires. It will be noted that none of the ranchos can afford the use of charcoal. Practically all of the households use kerosene for lighting; and all but four have wooden beds. Further proof of the sophistication and wealth (comparative) of Atzimbo is the presence of 2 carts, 6 sewing machines, 1 phonograph (the only one in all the ranchos), and 16 metal handmills for grinding maize to be used in making tortillas. Although all of the other ranchos have at least 1 or 2 hand mills, and Icuácató has 23 and Sanambo 18, the considerable number in Atzimbo, together with the predominant use of kerosene for lighting and wooden beds for sleeping, etc., tend to put this rancho in a class by itself.

ZIRANDANGACHO

The former pueblo of Zirandangacho (Tziran-dangacho, Tzirandangatzio, Çerandacho, Sirand-agacho, Serandanguacho, etc., in various documents) at present scarcely deserves the title of rancho. Situated less than a mile southeast from Quiroga, at an elevation of 2,042 meters, Zirandangacho is hardly more than a slightly removed suburb. All of the farmlands are owned by a Quiroga family (the Barriga brothers) and a Morelia family (the intermarried Villanueva-Villaseñor-Zamudio group), and the residents in the rancho settlement are little more than the laborers on the adjacent farms. The present community of Zirandangacho is located where a ridge extending south from the Cerro Tucurullo intersects the Llano de Tzintzuntzan, and the exact location along this line of intersection was determined by the presence of an excellent spring a few rods out from the base of the ridge. That this area contained the former pueblo of Zirandangacho is indicated by the many potsherds, artifacts, and burials that occur along the slopes and in the *llano* immediately to the north of the present settlement. Furthermore, the many little springs and marshy areas between Zirandangacho and the Arroyo del Cerro Azul toward the west coincide with the 1603 complaint that the lands of this pueblo were swampy or exhausted. This Pueblo de Zirandangacho (under many variants of the name) was the most mentioned in the records of the sixteenth century of any of the settlements within our area of study. Apparently a combination of loss of population from epidemics and loss of lands through encroachment of whites reduced the community by 1603 to a condition of insignificance from which it never has recovered. The chapel which existed in the early colonial period when Zirandangacho was a *visita* of Tzintzuntzan has been in ruins for more than a century, and little more remains to indicate its former existence than an open rectangle at the margin of the *llano* (La Plazuela de Zirandangacho) outlined by large and old ash, cypress, and avocado trees. There is but one mulberry tree, and a *predio* known as El Moral, to recall the presumptive origin of the name *ziran anacho* (where there is the small mulberry tree). Since May 3 is the main day of *fiesta* for Zirandangacho, the assumption is that the

avocation of the pueblo and chapel was Santa Cruz.

Since all the heads of family are either laborers (4) or share croppers (5) for Barriga or Zamudio, and only 3 own *solares* in Zirandangacho, it is rather pointless to outline the boundary of the rancho or to detail the economy. Roughly speaking, the lands owned by the Barriga and the Villanueva-Villaseñor-Zamudio which are immediately around the settlement can be considered a part of the rancho. The crops raised and the livestock run on these holdings are considered under Quiroga. The settlement itself consists of the ruins of some 20 adobe and stone structures, and 7 houses—all of which are 1 story of adobe with tiled roofs of *dos agus*. Included in the population are the 2 families of employees of Leonardo Zamudio who live in a 2-story house near some corrals at a distance to the southeast and in a small house near the main storage barn or *jacal* and a threshing floor. The total population in 1945 was 52; in 1940, 24; in 1930, 34; in 1921, 24; and in 1900 it was 72. There is no chapel, store or *tendañón*, or school, and all of the inhabitants are illiterate. The water used is carried from the spring, which has a strong run-off and is used also to water livestock, for washing clothes, and to irrigate some nearby wheat fields. Formerly Coronel Villanueva irrigated an alfalfa patch with these waters. On and around their small house plots the inhabitants keep a few animals, such as 22 hens and roosters, 4 turkeys, 2 pigeons, 4 cows and calves, 1 pig, 3 burros, 5 horses, 43 beehives, and 11 dogs and 2 cats. As was true for La Tirimicua, these figures are too low. In the settlement there are a number of willow trees by the spring, a scattering of 29 peach trees, 6 lemons, 5 cypresses, 3 white *zapotes*, 3 avocados, numerous ash trees around the *plazuela* and along the highway, many agaves and cactuses along the fences and over the hillside, etc. The highway which passes between the settlement and the spring formerly was of great importance, since from 1886 until the revolution most of the movement of goods into and out from Quiroga passed along this highway which led to the railroad station of Chapultepec some 7 miles distant. Among the luxuries present in Zirandangacho were three sewing machines, one wooden bed, one cot, one maize mill, and about a dozen flower pots with "geraniums."

QUIROGA TOWN

(MAP 4)

Having discussed all of the permanent ranchos, there remains only the *villa* or town of Quiroga itself among the settlements in our area of study. Previously we have outlined what is known of the development of this settlement during the sixteenth and seventeenth centuries. There is practically nothing more to be added until the period of independence after 1822. By this time we know that Cocupao had become the seat of a municipal government, and that its population included whites, mestizos, and mulattoes, as well as Indians. Tradition, as obtained about 1874 by Nicolás León from old inhabitants, claims that the pueblo was burned to the ground in May 1811 by a revolutionary chief (Padre Antonio Torres, a native of Cocupao) so that it could not give shelter to royalist forces. Since all of the houses probably were of wood with roofs of shakes or grass it is quite likely that the tradition is true, at least as far as a great fire that wiped out the village. It was also claimed that the village church, former Franciscan convent (Cocupao was secularized in 1786), Indian hospital and chapel, and all associated structures were destroyed at the same time. The present parish church presumably was built some time between 1812 and 1818. Granting the total obliteration of all structures in Cocupao in 1811, probably the resettlement that took place in the quiet years of the revolution against Spain (1816 to 1821) took the same lines as the earlier settlements since each family would rebuild on its traditional *solar*. There is no known basis for León's assumption that at this time Cocupao moved from La Tepóricua to its present site. In 1827 the State congress passed a law requiring the pueblos and larger settlements of Michoacán to be divided or organized into quarters (*cuarteles*) and blocks (*manzanas*). As we have no detailed records of Cocupao until 1860, we can only assume that this was done. Up until this date presumably Cocupao had only the division into *barrios* and a few streets with names.

We have already listed and located the four *barrios* of Cocupao, and given our opinion that they originated with four nuclear communities that went into the make-up of the pueblo in 1534. There is no indication that any of these *barrios* might represent differences in dialect or occupation, or sib groupings and landowning groups, as

was sometimes the case elsewhere. It is of some interest that San Miguel is represented as a *barrio* name in most of the Michoacán towns with which we are familiar, but the other three names represented in Cocupao (San Francisco, San Bartolo, and La Ascensión) are not so common. After San Miguel the most popular names are San Pedro, María Magdalena, San Juan, and Santiago. Apparently there was a tendency in Michoacán pueblos to have either four or eight *barrios* (this type of *barrio* is not to be confused with the term as applied to an outlying dependent community). Perhaps this tendency stemmed from the fact that four was the most popular and esteemed number among the Tarascans. Only one street name is definitely known from the pre-Independence period—that of the Calle Real. As was true with nearly all Spanish-American communities in colonial days, the Calle Real (Royal Street) was the main thoroughfare of the community. It is somewhat puzzling that the former Calle Real was not what is now known as the Calle Nacional (passing between the church and the municipal palace) but was the street now termed Calle Zaragoza which extends west from the center of town between *cuarteles* I and II, and in front of the Plaza de la Constitución. Perhaps an answer to the puzzle is the alternative name for this plaza which is "Plaza Vieja" or "The Old Plaza." Possibly the main market square or plaza of Cocupao was here at some time prior to 1858, but this supposition encounters a difficulty in the fact that half of this plaza belonged to Santa Fe until it was purchased in 1861. There is, of course, the possibility that Santa Fe and Cocupao held a joint market in this plaza. At all events, we can be fairly certain that Cocupao, like Pátzcuaro, never had any religious buildings fronting on its largest or principal plaza. What Toussaint (1942, p. 202) mistakenly has labeled Plaza Antigua, in front and to the west side of the parish church, never was the principal plaza of Quiroga. The area in front of the church was the cemetery, which was replaced in 1850 by the Panteón Civil erected on the northeastern outskirts near La Tepóricua. The area to the west of the church, now known as the Plaza de los Mártires, and where the market is held, did not exist until some time in the 1860's (after the French Intervention) when the old municipal buildings (office of the *ayuntamiento*, jail, etc.) which occupied this site were torn down

and the plaza was inaugurated and named after some prisoners of war who were shot here by Mexican Imperialists in 1866. As early as 1858 the term "Plaza Principal" was applied to the small but centrally located plaza, surrounded on three sides by *portales* constructed 1861-63, which still bears this name. And as early as 1860 the present Plaza de la Constitución was being referred to as the Plaza Vieja. The three plazas that we have just mentioned are the only plazas in Quiroga, although there are a number of small "squares" or *plazuelas* which are discussed later.

STREETS

Our discussion of the development of divisions, streets, plazas, leading buildings, etc., in Quiroga is based primarily on a study of the minutes of the municipal cabildo, the records in the civil register, a few inscriptions, several old property titles, and the recollections of some of the older inhabitants (which last item caused more confusion than it provided help). The growth of Cocupao is indicated by its elevation to Villa de Cocupao de Quiroga in 1852, and its separation from Tzintzuntzan and establishment as an independent parish or curacy in 1853. During the 1850's the new cemetery was inaugurated, a chapel of San Miguel was erected in the *barrio* of that appellation, the ruined church of the old Indian hospital (known as the temple of La Concepción) was restored, a fountain or *pila* with a statue of "America" (the figure of a woman at the top of a shaft) was erected in the Plaza Principal, the parish church was repaired after the damages wrought by the great earthquake of June 19, 1858, and numerous streets were opened up and several bridges were built over the Arroyo de Quiroga and other streams which pass through the town. As of about 1859 there were reputed to be 40 streets in Quiroga. This figure is misleading since what we would call a street five blocks in length would be broken up into as many streets as there were blocks; i. e., a grid of five north-south streets intersecting five east-west streets would provide 40 different street names, although a few of the more important routes or streets might retain the same name for several blocks.

STREET NAMES

The evolution of the street names in Quiroga provides an interesting sidelight on national and

local history. The names can be divided into three groups: (a) Names of local significance and mainly from the colonial or early republican period, (b) names of heroes of the revolt against Spain (1808-21), and (c) names of heroes of the Wars of Reform (about 1854-61), and names of heroes of the French Intervention (1862-67). The paucity of names from the Díaz period and from the Madero revolution is noteworthy. With changes in the political complexion of the *ayuntamiento* there were commonly changes in street names. Furthermore, a certain name might be applied to a street in one part of town at one period, be discarded by a later *ayuntamiento*, and still later be resurrected and applied to a street in some other part of town. Although the location of a number of the streets has not been determined, we give below the names in the various classes. If general or exact location of a street is known, it is preceded by the roman numeral indicating the *cuartel*. Names in capital letters are still in use, either commonly or officially; only the portion of the name most frequently used is capitalized; e. g. (Pablo de) LA LLAVE, or Manuel DOBLADO. The names within parentheses, just after the name being discussed, represent past or present synonyms. The meanings of common names are given in English, and the importance of individuals is given in brief form. The dates, after the listing, indicate last mention encountered (-1861, for example), first mention (1873-), or period of mention (1909-13).

Local names, probably of colonial origin

Abasto Viejo (Rastro Viejo), slaughterhouse abandoned prior to 1860 and not to be confused with the present street of that name.

II AGUA, water.

Alamo, poplar, -1861.

II ALCANTARILLA (AGUACATE, González Ortega), water tower or fountain.

II and III Alcantarillas (CALVARIO, n. Nacional, RAMON CORONA), underground conduit.

Atascal, barrier or miry place.

II BANO DE CABALLOS, horse bath.

II Buenavista, good view, -1913.

Cadena, chain, -1863.

II and III CALVARIO (n. Nacional, RAMON CORONA), calvary.

Canela, cinnamon, -1863.

Cerbatana, culverin or blowgun, -1861.

III Chirimoya, Cherimolia, -1929.

I CORONA (s. REFORMA), crown.

III and IV CRUZ (e. JUAREZ), cross.



- == CALLES Y CARRETERAS
- CAMINOS Y VEREDAS
- ARROYOS
- OJOS DE AGUA
- ⊙ FUENTES EN PLAZUELAS
- ALCANTARILLAS
- PUENTES
- CERCOS Y MUROS
- ⊕ YÁCATAS

CUARTELES
1, 2, 3, 4, etc. MANZANAS
ER. - ESCUELA RURAL (ANTIGUA
CAPILLA DE SAN MIGUEL)
PP. - PLAZA PRINCIPAL
PC. - PLAZA DE LA CONSTITUCIÓN (PLAZA VIEJA)
PM. - PLAZA DE LOS MÁRTIRES (Y MERCADO)
V. - PLAZUELA DE VALLE
B. - " " N. BRAVO
M. - " " MINA (DE LOS NEGROS)
AC. - ADMINISTRACIÓN DE CORREOS
BC. - BAÑO DE CABALLOS
SD. - LA PARROQUIA (SAN DIEGO)
LC. - LA CONCEPCIÓN (ANTIGUO HOSPITAL
DE INDIOS)
SV. - CAPILLA Y HOSPITAL DE SAN VICENTE



Map 4.—Plan of the Villa de Quiroga, Michoacán, 1945.

Cuatro Esquinas, four corners, -1862.
 II CUERNO (TRANCHETE, Comonfort), horn.
 Culebra, snake, -1861.
 IV CURATO, parish house, -1860.
 Escondida, hidden, -1868.
 Herreros, blacksmiths, -1862.
 I Huerta (TACON), orchard, -1913.
 IV JAZMIN, jasmine.
 Laurel, laurel, -1873.
 Limones, lemons, -1863.
 Manzanillo, little apple, -1863.
 Mesquite, mesquite, -1863.
 IV MONTANA, hill.
 Muta, pack of dogs, -1863.
 Moral, mulberry tree, -1863.
 I NOPALERA (Nopales), cactus patch.
 II OLIVO (Comonfort), olive.
 IV Ontiveros (SALAZAR), family name, -1910.
 Oripundio, oriole ?, -1861.
 Palma, yucca, -1862.
 Panaderos, bakers, -1863.
 IV PARROQUIA, parish church.
 II PLAZA VIEJA (PLAZA DE LA CONSTITUCION), old plaza.
 Plaza de Gallos (Plaza Vieja de Gallos), cockpits, -1863.
 Puente Chico, little bridge, -1863.
 I and II REAL (ZARAGOZA), royal.
 Recodo, crook or turn, -1863.
 III RETRAIDO, retreat.
 Zapote, white zapote, -1861.
 Zarza, bramble, -1862.

Local names, probably or certainly post-colonial

IV Abasto (Corrales, Rastro, RASTRO or ABASTO VIEJO), slaughterhouse, -1925.
 Alameda, poplar lane, 1902.
 II ARCO, arch of aqueduct, 1873-.
 I Artesano, artisan, 1873-1913.
 III BASURERO (n. GALEANA), trash heap.
 Boliche, a small ball, 1902.
 Campana (DOBLADO), bell, -1862.
 III CAMPOSANTO (CEMENTERIO, PANTEON, e. DOBLADO), cemetery, 1850-.
 I CARRERAS (Mina, w. Cuauhtemoc), race track or course for horses, 1869-.
 III Carrizal, cane clump, 1909-13.
 Chivo, goat, 1912.
 III and IV CONCORDIA (SORPRESA), concord or harmony, 1872-.
 Estación Vieja, old stage station, -1861.
 Gesto, grimace, or feat, 1913.
 H, "H" street, -1862.
 I INDUSTRIA (Fábrica -1861, Progreso 1861-1910), industry, 1910-.
 II JARDIN, garden, 1901-.
 Miedo, fear, 1905-1912.
 I MUELLE (EMBARCADERO), dock or pier, 1887-.
 I NUEVA (w. ITURBIDE), new street, 1860-.
 II and III PLAZA PRINCIPAL (JARDIN BELISARIO DOMINGUEZ), main square, from as early as 1834-.

I PLAZA DE TOROS (s. REFORMA), park for bull fights, 1901-.
 Pliego, sheet of paper or package of papers, 1874-77.
 III and IV PUEBLO or BARRIO NUEVO (e. Zaragoza, e. JUAREZ), new town, 1872-.
 Ratón, mouse, 1913.
 II Reparo (Reposo, Retiro, Recreo), restoration or repose, 1900-1913.
 Rincón, inside corner or nook, 1875.
 III and IV SORPRESA (CONCORDIA), surprise, 1902-.
 II Susto, fright, 1905-1909.

Names of revolutionary heroes, 1808-22

II (Mariano) ABASOLO; general under Hidalgo 1810-11; 1901-.
 I (Juan) ALDAMA; captain under Hidalgo 1810-11; 1907-.
 III Portal (Ignacio) ALLENDE (Portal Iturbide 1878); with Hidalgo; 1862-.
 I Pila and plazuela of (Nicolás) BRAVO (de los Naranjos to 1863; Degollado 1863-1901); great revolutionary from Guerrero under Morelos and then Iturbide, and president several times; 1901-.
 III and IV (Hermenegildo) GALEANA; warrior from Guerrero under Morelos 1813-14; 1863-.
 III and IV (Vicente) GUERRERO; greatest general from Guerrero 1811-21, and president 1829-30; 1863-.
 II Portal (Miguel) HIDALGO y Costilla; beginner of the revolution 1810-11; 1861-.
 I JIMENEZ; probably named for the associate of Hidalgo, but possibly after Mariano Jiménez, governor of Michoacán 1885-91; 1906-.
 II (Pablo de) LA LLAVE (n. Reforma, NEGRETE), priest, botanist, and statesman from Veraacruz who lived in Michoacán for a time; 1902-.
 III (José Nicolás) MICHELENA; leader of Valladolid conspirators; 1903-.
 III (José María) MORELOS y Pavón; leading general 1811-15; from before 1860-.
 III Portal (Mariano) MATAMOROS (Portal Morelos 1861-63); chief lieutenant of Morelos 1812-14; 1864-.
 I and IV Pila and plazuela of (Francisco Javier) MINA (Pila and plazuela de los Negros); Spanish guerrilla and adventurer killed in Guanajuato 1817; 1864-.
 I and IV Mina (CARRERAS and JAZMIN); 1868-1917.
 II (Pedro) NEGRETE (n. Reforma); revolutionary and member of the regency 1822-23; 1902-.
 I (Ignacio López) RAYON; lieutenant of Morelos; ca. 1916-.
 IV VICTORIA, probably named after Juan Felix Fernández of Durango who took the name Guadalupe Victoria, was undefeated in the revolution and was first president 1824-29; 1864-.
 Congreso; probably from 1813 and 1814 congresses in Chilpancingo and Apatzingán; 1909.
 I and IV NACIONAL (formerly all of RAMON CORONA also); national street; from before 1860-.
 III Patriota (DOBLADO); patriot street; 1864-1911.

Names of heroes of the Reform period and the French Intervention 1854-67

- I Juan ALVAREZ (TACON); hero from Guerrero of 1811-21 revolution, Plan de Ayutla 1854-55, president 1855, fought against French 1862-67; 1905-16, and still used occasionally.
- III José María ARTEAGA; liberal general from Mexico shot in Uruapan 1865; 1904-.
- IV Felipe BERRIOZABAL (GALEANA in part); liberal general 1850's; 1901-.
- II Ignacio COMONFORT (OLIVO and CUERNO); liberal general from Puebla in Wars of Reform, president 1855-58, fought French 1862-63; 1921-.
- II and III RAMON CORONA (CALVARIO, n. Nacional, Vasco de Quiroga); liberal general and leader against the French, from Jalisco; 1901-.
- I DEGOLLADO; named for Santos Degollado or his brother Mariano Degollado, both of whom were liberal associates of Ocampo and often visited Quiroga; 1863-.
- III Manuel DOBLADO (Campana, Patriota, w. Pan-teón); liberal leader from Guanajuato; 1901-.
- I ITURBIDE (CALLE NUEVA and JIMENEZ); named for either Colonel Andrés Iturbide, a cavalry officer from Michoacán who was killed in 1858, or from another Michoacán liberal and associate of Ocampo who frequently visited Quiroga—Manuel Iturbide Mayor; 1863-.
- II GONZALEZ ORTEGA (LA ALCANTARILLA, EL AGUACATE); defender of Puebla against the French 1863; 1902-.
- III and IV BENITO JUAREZ (PUEBLO NUEVO, e. Zaragoza); liberal judge, minister, and president 1855-72; 1901-.
- III Miguel LERDO DE TEJADA; minister and justice who published the so-called Ley Lerdo in 1856; 1863-.
- II Melchor OCAMPO; great liberal governor 1846-52 after whom the State is named Michoacán de Ocampo, and author with Juárez of the Ley Lerdo; ca. 1852-.
- IV Manuel García PUEBLITA; military commander of Michoacán 1864-65, who defeated French in Quiroga 1865; 1902-.
- IV Carlos SALAZAR; liberal general from Tamaulipas shot in Uruapan 1865; 1901-.
- II and III Plazuela de VALLE; individual referred to is uncertain; 1879-.
- I and II Ignacio ZARAGOZA (CALLE REAL; formerly all of Juárez also); Mexican general who won the first battle of Puebla from the French May 5, 1862; 1863-.
- II Plaza de LA CONSTITUCION (PLAZA VIEJA, Plaza de los Republicanos, Plaza Nacional); the great liberal Constitution of 1857; 1868-.
- IV Plaza de LOS MARTIRES; Mexican prisoners of war shot in Quiroga 1866; ca. 1867-.
- I REFORMA (formerly all of NEGRETE, LA LLAVE; includes LA CORONA, PLAZA DE TOROS); the LEYES DE LA REFORMA published by Juárez in 1859; 1863-.

A number of other names have been applied to the streets of Quiroga, but this was chiefly on paper. About 1910 and until the revolution one street was named after Governor Aristides Mercado, but with the possible exception of Governor Jiménez there were no other Quiroga streets named after Porfirio Díaz and his henchmen. A new slate of names was prepared about 1921-23, but of the new names (such as Cuauhtemoc, Vasco de Quiroga, Colón, Altamirano, Bustamante, Escobedo, and Melgar) the memory of only a few has been retained. In 1943 there was proposed to the *ayuntamiento* the renaming of some of the streets after heroes of the Madero revolution (among the names proposed were Lázaro Cárdenas, Venustiano Carranza, and Francisco I. Madero), but none of these names was ever approved. In 1946 we proposed some names for lanes and streets currently without names, and these were entered by the *ayuntamiento* on the map of Quiroga which we had prepared, copies of which were presented to the *ayuntamiento*, the tax collector, and the postmaster. The names proposed were those of individuals connected with the history of Quiroga or the entire Pátzcuaro Basin (Riva Palacio, Francisco de Paula Placencia, Vicente Elizarraras, Trinidad Valdés, Antonio Torres, Calzontzin, and Tariácarí), but it is still too early to determine if any of these names have "caught on" with the citizens of Quiroga. Recently (since 1937) the local Sinarquistas improved the portion of La Concordia leading to the cemetery and placed a marker naming that portion Los Mártires del Sinarquismo (the Martyrs of Sinarchism).

The inhabitants, from colonial times to the present, have tended to name the streets upon which they live after salient objects or notable local events. Names of large or unique trees and shrubs are common (Aguacate, Chirimoyo, Jazmín, Mesquite, Olivo, etc.) although in most instances these trees have long since disappeared. Such names as Alcantarillas, Plaza de Gallos, Plaza de Toros, Estación Vieja, Fábrica, Muelle, Jardín, and Huerta, recall in many instances establishments which do not now exist, but they enable us to reconstruct the social and economic history of the community. The two streets named after guilds, or occupations, imply a concentration in special areas of the bakers and blacksmiths, but we are not certain of their location

(Herrereros was probably the present Calle de Negrete, and possibly Panaderos was the present Guerrero). We can only guess what events are commemorated by such names as Chivo, Culebra, Escondida, Concordia, Sorpresa, Susto, Miedo, Gesto, etc. Despite all names applied by the *ayuntamiento*, the residents of the streets away from the center of town continue to use the older local names. Also, owing to the many changes, it is common for a given street to be called differently by the different generations of residents; e. g., what the officials and younger people term Ramón Corona is known to older residents as Nacional, or Alcantarillas, or Calvario.

Although we have seen titles of the eighteenth century with a few street names, and though a State law of 1827 required the division into *cuarteles* and *manzanas* (which presupposes streets with names), there is no evidence that any street name plates or signs were in use prior to about 1860-63. In the periods just after the Wars of Reform (1860-64) and the French Intervention (1867-73) there was much activity in opening new streets, building bridges, numbering the houses, applying patriotic names, and constructing a map of the town (which was reported lost in 1869). The heroes of the revolt from Spain were given preference at first, and the three porticos or *portales* erected on three sides of the Plaza Principal (1861-62) were named after Hidalgo and two of his lieutenants (Morelos—replaced in 1864 by Matamoros, and Allende). The use of these men's names for *portales* is especially common in Michoacán. The State of Michoacán has been fortunate in subjects for names since the majority of the revolutionary heroes were natives of Michoacán proper or of the former province which included Guanajuato (e. g., Hidalgo, Morelos, Allende, Abasolo, Aldama, Bustamante, Iturbide, Michelena, Matamoros, Rayón, etc.). Michoacán and Guanajuato also provided many of the great liberals of the reform period and war against the French, and a number of these were personally known in Quiroga (such as Ocampo, Degollado, and Doblado). A number of names of liberals were affixed to streets in 1863; were removed during reactionary periods 1864-67 and 1872-76; and were restored with the coming to power of Díaz in 1876. The Díaz regime sponsored and cultivated order in all forms, including street names, which was most marked 1891-95

(cuarto-centennial of Columbus, national census, maps of all towns—that of Quiroga of 1895 also was lost), from 1900 to 1905, and in 1910 (centenary of the movement for independence). Especially in 1901 and 1902 there were many streets in Quiroga renamed for patriots of the revolt from Spain and for heroes of the Reform Wars and French Intervention. It is indicative of Quiroga's adherence to local heroes that such great out-of-state heroes as Bravo, Alvarez, and Juárez were not represented until this time. The last important period of name changes was 1921-23 (commemoration of Independence), but these names did not last.

PATTERN

The present form of Quiroga town is that of an asymmetrical lozenge based upon a north-south axis (Ramón Corona-Plaza Principal-Nacional) 1,631 meters long, and an east-west shorter axis (Benito Juárez-Zaragoza) 1,283 meters in length. The orientation is askew about 5° to 25° in different parts of town; no street is perfectly straight; and no block is a perfect rectangle. The intersection of the two axes (*ejes*) divides Quiroga into four quarters or *cuarteles* which are numbered clockwise beginning with I in the southwest quadrant. The series of truncated triangular and asymmetrical polygonal blocks in the zone of contact of the four quarters would seem to indicate that the four *barrios* expanded or grew from eccentric nuclei toward the official center of town and filled the vacant irregularly shaped space with the only forms of *manzanas* possible. Until the middle of the previous century the shape of Quiroga was that of a crossroads string town with most of the population along or near the north-south street which was a segment of the road from Pátzcuaro to Chucándiro and Lake Cuitzeo, and a minor distribution along an east-west route (between the springs of La Tepóricua and Atzitzíndaro) by which passed some traffic between Morelia and Santa Fe, Zacapu, and other settlements to the west. This east-west line was presumably the boundary of the Barrio de San Miguel against the *barrios* of La Ascensión and San Francisco. In 1861 the town acquired the equivalent of some 10 or 12 blocks at the west side of town by purchase from Santa Fe; and in 1871 the area east of Berriozabal-Galeana was purchased from members of the Comunidad de Indígenas de Quiroga and di-

vided into *solares*. From the 1860's to the Madero Revolution growth took place in all four directions, but most importantly to the west around the Plaza Vieja. From 1914 to 1928 (owing to the revolution, bandits, Cristeros, et al.) many houses were abandoned, especially at the west and in the north where there are to be seen the greatest number of ruins of adobe houses. Recent growth has been out along the axial lines in all directions excepting toward the north. This is an expression of the paved highways which lead to Morelia 27 miles to the east, to Pátzcuaro 16 miles south, and Zacapu 27 miles to the west.

Formerly there was an attempt to have a few streets cross the entire town in both directions: East-west—Zaragoza (Benito Juárez and Zaragoza) and Mina (Jazmín and Carreras); north-south—Reforma (La Llave, Negrete, Reforma), Nacional (Ramón Corona, Plaza Principal, Nacional), and Galeana (Basurero, Galeana, Berriozabal, Abasto Viejo). At present no street carries the same name for more than 6 blocks (only Zaragoza extends through 6 blocks), and but 11 streets have more than 2 inhabited blocks (Zaragoza 5, Nacional 5, Berriozabal-Galeana 4, Juárez 4, Ramón Corona 4, Morelos 4, Reforma 3, Doblado 3, Ocampo 3, Victoria 3, and Iturbide 3). Three streets (Guerrero, Galeana, and La Concordia) extend from *cuartel* III into *cuartel* IV for distances varying from a half block to 1 block.

SUBDIVISIONS

The division of Quiroga into numbered blocks presumably began in 1827. The blocks or *manzanas* in each *cuartel* are numbered so that censuses and other records can locate a person or family by stating, e. g., house No. 32 on street Reforma in the sixth block of the first quarter. Every *manzana* has two numbers: its current number within the *cuartel*, and its number along a given street; e. g., the most northerly block on Ramón Corona (on the west side) is Manzana 7^a of *cuartel* II but it is also the fourth *manzana* of the Calzada Ramón Corona. Although presumably the block numbers within the quarters are fixed, they actually vary with the whim of the *ayuntamiento*, census takers, map makers, and anyone else interested in the matter. In part this is because of the settling and abandoning of pe-

ripheral *manzanas*. Since the numeration begins with the *manzana* nearest to the "four corners" of the *cuarteles* and proceeds northward or southward by tiers, it is evident that if the outermost *manzana* in the first tier is abandoned it will cause a renumbering of all the *manzanas* that come after it. Furthermore, often when there is a peripheral *manzana* with only two or three families it will be included with an adjacent *manzana*. In table 1 we present the logical numeration of all *manzanas* with any permanent inhabitants (column 2) and the equivalent numeration of other censuses and periods. The *manzanas* have been grouped by tiers, set off by lines. Where blocks still retain old signs these numbers are indicated; the other numbers in parentheses in that column indicate the complete numeration consistent with the signs. It will be noted that at one time *manzanas* were numbered east and west from Calle Nacional in *cuartel* IV.

TABLE 1.—Numeration of *manzanas* in Quiroga

Cuartel	Manzanas					
	1 Com- plete, logical	2 Inhab- ited, logical	3 Our map of 1945	4 Municipal list 1945	5 Census of 1940	6 Old signs
I.....	1	1	1	1	1	(1)
	2	2	2	2	2	2
	3	3	3	3	3	(3)
	4 and 4A	4 and 4A	4 and 4A	4	4	(4)
	5	5	5	5	5	(5)
	6	6	6	6	6	(6)
	7	7	7	7	7	(7)
	8	-----	7A	-----	-----	(8)
	9	8	8	8	8	(9)
	10	9	9	9	9	10
	11	10	10	10	10	(11)
	12	11	11	11	-----	(12)
	13	-----	12	-----	-----	(13)
	14	-----	13	-----	-----	(14)
	15	-----	14	-----	-----	(15)
II.....	1	1	1	1	1	1
	2	2	2	2	2	2
	3	3	3	3	3	3
	4	4	4	4	4	4
	5	5	5	5	5	(5)
	6	6	6	6	6	(6)
	7	7	7	7	7	7
	8	8	8	8	8	11
	9	9	9	9	9	(10)
	10	10	10	10	10	9
	11	11	11	11	-----	8
	12	12	12	11A	-----	12
	13	13	13	12	-----	(13)
	14	-----	14	-----	-----	(14)
	15	-----	15	-----	-----	(15)
	16	-----	16	-----	-----	(16)

TABLE 1.—Numeration of manzanas in Quiroga.—Con.

Cuartel	Manzanas					
	1 Com- plete, logical	2 Inhab- ited, logical	3 Our map of 1945	4 Municipal list 1945	5 Census of 1940	6 Old signs
III-----	1	1	1	1	1	(2)
	2	2	2	2	2	3
	3	3	3	3	3	4
	4	4	4	4	4	(5)
	5	5	5	5	5	(1)
	6	6	6	6	6	(6)
	7	7	7	7	?	-----
	8	8	8	9	8	(7)
	9	9	9	10	9A	8
	10	10	10	8	7	(9)
	11	11	11	11	10	(10)
	12	12	12	12	9	(11)
IV-----	13	13	13	13	11	(12)
	14	14	14	13A	-----	(13)
	1	1	1	1	1	1
	2	2	2	2	2	(8)
	3	3	3	3	3	9
	4	4	4	4	4	(2)
	5	5	5	12	5	(7)
	6	6	6	5	6	10
	7	7	7	6	7	(13)
	8and8A	8and8A	8and8A	7	8	(14)
	9	9	9	8	9	(3)
	10	10	10	9	11	(6)
	11	11	11	10	12	11
	12	12	12	11	13	12
	13	13	13	13	14and15	(4) and (5)

SIGNS AND NUMBERING

Four streets are oiled or asphalt-surfaced—the streets traversed by the Morelia-Guadalajara highway (Benito Juárez and Zaragoza), the street on which the branch highway turns off to Pátzcuaro and Tacámbaro (Calle Nacional), and the cut-off connecting the Pátzcuaro road with the Guadalajara road at the southwest of town (Carreras). These streets were surfaced in 1938 and 1939, at which time it was necessary to widen Benito Juárez and Zaragoza by cutting away the fronts of all of the houses along the south side of the street. As one consequence, there are no signs indicating *cuartel* or *manazana* numbers or giving the names of streets in the northern portions of *cuarteles* I and IV. In all the town there are only 25 name signs (painted in black on whitewashed walls of buildings) which give the identity of 20 streets. Considering the local usage of applying a street name to distances varying from $\frac{1}{2}$ block to 6 blocks, there are 119 “blocks” or segments of streets within the limits of Quiroga, which carry 52 different names (including *plazuelas* and *portales*) and eight streets are without names. This

means that only one-third of the streets are posted. There are 89 occupied “blocks” on 51 streets and plazas. At least three systems of house numbering have been applied in recent times, since we found a number of houses having 3 different numbers, each number being painted in black with a different type of stencil. Away from the central streets the numbering at present is chaotic. The preservation of numbers from earlier times, the eradication of numbers by whitewashing or loss through weathering, the abandonment and complete elimination of houses that formerly occupied a place in a sequence, and the subdivision of *solares* and erection of new houses for which there was no place in any sequence used previously, have combined to make the sequence of house numbers on some streets highly irregular and misleading. As an example we give the sequence of current house numbers on the west side of Ramón Corona (older numbers are within parentheses): 1 (80), 3 (4), 5 (78), 7, (76), (74), (72), 13, 17, 19, 21 (66), 23 (64), 25; 27 (24, 62), 29 (26), 31 (58), 33, 35, 37, (50), 41, 43, 45 (44), 47 (40, 42), 49 (40, 42), x, x, x, 55, 57 (48); 59 (50), 61 (52), 63, 65 (54), 67, 69, 71, 73, 75 (66), 77, x, 81 (68), 83 (70), 85, x, 87, 89, 91, 93, 95; x, 97 (82), x, 99 (84), 101, 103, 107, (73, 88), x, x. Although the odd numbers are commonly on the left side as one goes out from the center of town, it will be noted that at one time the reverse procedure was in vogue. It should be mentioned that in Quiroga, and commonly elsewhere in Mexico, numbers are continued in alternating sequence from block to block. In the example given above four blocks were involved, which are set off by semicolons.

PAVEMENT

At one time, prior to the Madero Revolution, all four axial streets were paved with cobblestones, and most of the other streets within three blocks of the center were paved in the same fashion. In recent years there has been little or no attempt to keep the streets in repair; and one encounters a regular sequence, going out from the center, of fully cobblestoned streets, degenerated pavement with many stones missing, and dirt streets that probably never were paved. At least 20 streets have no pavement of any description. These dirt streets are usually far more pleasant to walk upon than are the cobblestone streets; but the stone

pavement prevents the cutting of trenches by pack animals proceeding in single file, and during the rainy season the uneven but solid surface of the cobblestones is preferable to the mud lanes into which many of the dirt roads are converted. A number of the cobblestoned streets, especially those that run downhill from north to south, slope in toward the middle so that a central gutter is provided for the run-off of the rainy season. Many of the town houses have the privies located against the blind wall facing such a street so that the liquids can run out (through a stone-slab conduit under the sidewalk) to the gutter. The sidewalks vary in location and material about as do the streets. Along the oil-surfaced streets the sidewalks are commonly of asphalt over crushed rock with a cement guard on the street side. Elsewhere, along the cobblestoned streets, the sidewalks are also of cobblestones, usually raised a few inches above the general street surface. The sidewalks differ from the streets in having smaller stones which are so fitted that a nearly flat surface is produced. In front of the houses of some of the wealthier residents the sidewalk is often of fitted flat stones or of large bricks. Along the dirt streets about half of the houses have sidewalks fronting the *solares*, and these sidewalks are commonly composed of a number of flat stones embedded on their sides so as to form a geometrical pattern with the interstices filled with earth. There are a few blocks with cement sidewalks, and these are on Zaragoza, Nacional, and Benito Juárez. The Government, after a delay of several years, poured the last of these in March of 1945. The width of streets and sidewalks varies greatly, but in general the greatest widths are to be found on the four main streets and the least are on minor peripheral streets known as *callejones*. The streets come in about four sizes: a few ranging between 13 and 18 meters, the majority averaging 8 meters and 10 meters, and a few ranging from 5 to 6 meters. The associated sidewalks vary from non-existent up to about 1½ meters in width.

GENERAL APPEARANCE

The general appearance of Quiroga is quite attractive, especially from July to February when the vegetation is greenest, the flowers are the most abundant and most colorful, and the houses and landscape in general have not taken on the sere

and dusty aspect of the dry season. If one approaches Quiroga by highway from the east, the first view (as one rounds the curve on the downgrade from Atzimbo) is of many adobe houses with red-tile roofs nestled in a cove where the lake plain meets the northeastern slopes and hills. To the north the houses straggle up a slope to El Calvario where the dun-colored Yácata de la Princesa (or del Calvario) and the white walls of the Federal rural school (partly obscured by the pointed cypresses of the former chapel of San Miguel) mark the upper limit of town. Five concentrations of trees attract the attention. On the right hand, at the northeast corner of town, is the cemetery with its gloomy cypresses and statuesque eucalyptuses—surrounded by a high adobe wall. In the middle foreground, just to the left of the highway and main street (Benito Juárez), is the white tower and front of the chapel of San Vicente—nearly obscured by a mixture of ash, cypress, avocado, etc. In the center, just right of the main intersection, are the tall ash trees that mark the Plaza Principal and which serve as background for the white tower on top of the Hotel Central. In the distance, on the right side of the angled continuation of the main street and highway (Zaragoza), appear the tops of the ashes and cypresses of the Plaza de la Constitución. To the left of center, and just east of the Calle Nacional, are the scattered ashes and cypresses of the Plaza de los Mártires and the front yard of the parish church, this side of which looms the mass of the parish church surmounted by its truncated bell tower. Barely visible beyond the church, on the other side of the Calle Nacional, is the clock tower on top of the old hospital church of La Concepción. The remaining large structure in Quiroga, the municipal building, is just south of La Concepción but is hidden by the mass of the parish church and the attached parish house. In the distance to the west can be seen the white church tower in Santa Fe, about 3 miles distant. On the southwest, past cultivated fields and the humped outline of the Cerro Huarapo, shimmer the waters of Lake Pátzcuaro about 1 mile away.

The charming bosky appearance of Quiroga does not derive so much from the trees in plazas and along streets as it does from the fact that practically every home (all but about a dozen) has a yard or patio in which are grown a number of ornamental and fruit trees and shrubs. There

are few real orchards (less than 20 in fact or name), and the majority of Quiroga's fruit trees are to be found scattered in small groupings over the entire town. The leading fruit trees are peaches (1,389), limes (166), figs (155), apricots (119), oranges (103), avocados (96), loquats (79), white *zapotes* (78), guavas (73), lemons (68), quinces (62), and cherimoyas (60); however, the more numerous fruit trees do not attain the size of the *zapotes*, avocados, cherimoyas, and native cherries (*capulines*) which vie with the strictly ornamental trees for prominence in the landscape. The *fresnos* or native ash trees (*Fraxinus uhdei* (Wenzig) Lingels) are probably fewer than 200 in the entire town (we counted 166), but they constitute the chief formal plantings along the main streets (principally the Calzada Ramón Corona which has nearly 40) and in the three plazas; and it is these *fresnos* (*paramu* in Tarascan) which provide the largest trees and the most shade. Next in importance among the formally planted ornamental trees are the cypresses (of at least three species). There are approximately 80 *cipreses* (also known erroneously as *cedros*), which are principally in the churchyard, the cemetery, and the Plaza de la Constitución. In recent years there have been planted about 30 privets or *truenos* (*Ligustrum lucidum* Ait.), chiefly along the parish house and on lower Ramón Corona. Also, in the past 15 years some 20 jacarandas and 18 casuarinas have been planted in different parts of town; the jacarandas are principally in the Plazuela de Bravo and the Plazuela de Valle, and the casuarinas are in private yards. The *gigante* or eucalyptus was first planted in Quiroga in the 1870's, but outside of the dozen *Eucalyptus globulus* Labill. (and perhaps another species) in the cemetery there has been little attempt to propagate this genus which appears to do quite well in the area. Because of scarcity of water there is but one *ahuehuete* (*pentamu* in Tarascan) or bald cypress (*Taxodium mucronatum* Ten.) in Quiroga, in the Plaza Principal at a point where tradition claims there was a watering trough more than a century ago. This *ahuehuete* appears to be dying slowly. The Peruvian pepper tree (*Schinus molle* L.), so common in the *bajío* communities to the north, is represented in Quiroga by fewer than a dozen scattered individuals, chiefly in the arroyos and on the outskirts of town.

Highly important in the landscape in the northern half of town, and along the fences and field boundaries in all of the outskirts, are agaves, cactuses, yuccas, *colorines*, and *chupires*. *Magu-eyes* or *acambas* (*Agave* spp.) are used to mark the *solar* and *sementera* boundaries, as is common over much of southern Mexico, and also are raised for drink, food, and fiber. There are no solid plantings of the agave, but some 200 punctuate the landscape in Quiroga. Besides the many small species of ornamental cactuses which are raised in *macetas*, there are perhaps a hundred clumps of *nopales* (*Opuntia ficus-indica* (L.) Miller and closely related species) in the yards, along the arroyos, and along the margins of the *sementeras*. On the top of adobe and of masonry walls, and even in trees, are a number of the *pitahayo* or *tuna tasajo* cactus (*Hylocereus undatus* (Haw.) Britt. & Rose) which both repels unwanted visitors and provides a most delicious fruit. Unlike so many Mexican towns, there are practically no (less than six) *órgano* or *cardón* cactuses, but the few are used in traditional fashion in fences. Serving as landmarks and as a popular source for place names are some 80 giant yuccas (*Yucca decipiens* Trel.), which are known locally as *palmas*, *izotes*, and *zambas*. Popular for their scarlet flowers and beans are the *colorines* or *purenchequas* (*Erythrina flabelliformis* Kearney) which must number at least one hundred within the precincts of town. The *chupires* (*Euphorbia calyculata* H. B. K.) have been cultivated by the Tarascans since prehistoric times, and are locally famed for their blistering juice or latex and for medicinal qualities. Perhaps it is not mere accident that the bulk of the *chupires* are found along the roads and fields of the Indian part of Quiroga. To complete the verdant picture are the castor-bean shrubs (*Ricinus communis* L.), both wild along the arroyos and cultivated for seeds and ornament, tree tobacco (*Nicotiana glauca* Graham), willows (*Salix* spp.), canes (*Arundo* sp.), and *castillos* (*Leonotis nepetaefolia* R. Br.) which abound along the arroyos of town, and the many species of grasses, composites, mints, solanums, etc., which grow wherever soil and some moisture are available—in the streets, by the houses, along the arroyos, etc. Added to all this vegetation are the cultivated fields (chiefly maize, some wheat, a little alfalfa) which completely

surround the town and extend inward in scattered lots to within two blocks of the center of town.

The appearance of the streets in the central part of town is clean and neat. The *ayuntamiento* hires a man who goes around with a mule-drawn two-wheeled cart and cleans up and hauls away the trash from these streets. On all the main streets and on a majority of the other streets the houses are built flush with the street or with the narrow sidewalk. There are no open spaces or yards in front of houses excepting in the peripheral suburban areas where the house may be built a rod or two back from the street, but this is decidedly the exception. In the majority of the occupied blocks the houses form an unbroken wall or front around the entire circumference. On occasion it is difficult to distinguish the individual houses, but a number of criteria usually allow the determination of ownership, construction, or dwelling units. Roof pitch, height of exterior front wall, and material are unreliable criteria; however, at one time or another most of the houses have been whitewashed, and the units can be determined from the age or weathering and general condition, the shade or hue, and the decorative lines or designs. Of the 725 structures in Quiroga, 566 have been whitewashed with a lime mixture, 20 have a brownish mud-plastered surface, 8 have a cement stucco or an oil-paint surface, and 131 houses either never have been whitewashed or have lost all traces of any surfacing. Commonly the front wall will have one or more horizontal lines (usually in blue or red) which extend the full frontage of the house (excepting on the door or doors) at a height of between 2 and 5 feet above the street or sidewalk. These lines or bands serve to break the monotony of the white front, and also they commonly set off the lower mud-splattered zone from the higher and whiter zone. Practically never will two adjoining houses coincide in the height, color, design and spacing of the decorative lines. Quite often, on careful inspection, it is possible to note the position of the joining crack between two houses even though it be covered with whitewash or plaster.

Although there are only four signposts in Quiroga (at the three highway entrances and at the central intersection), and no billboards, a considerable number of paper posters have been affixed to the walls (especially in the central 16 blocks). These are commonly massed at the

corners and constitute an illegal disfigurement since there are scattered statements lettered on the walls warning people not to post signs or advertisements ("No anunciar," etc.). The greatest variety of such advertisements is to be found in the signs proclaiming the virtues of various patent medicines, especially those presumably good for colds and headaches. In this group a rough count gave 89 Mejoral, 20 Pildoras Ross, 20 Roberina, 16 Cafiaspirina, and about 12 more representing five other tonics. In second place were the cigarette signs, all but four of which advertised Cumbres (60 posters). In addition there were 11 Coca-Cola posters, 2 of Carta Blanca beer, and 1 of Chiclines chewing gum. There were no signs advertising automobiles or tires, refrigerators, or any other kind of "hard" goods or expensive items. On occasion an ephemeral poster would appear advertising a circus, bullfight, or football (soccer) game in some neighboring town such as Morelia, Pátzcuaro, or Zacapu. Many of the houses also carried small printed posters on the door which stated that "*Este hogar es CATOLICO; repudiamos la propaganda PROTESTANTE*" (This is a Catholic home; we repudiate the Protestant propaganda). The only other signs commonly found on the building walls were the occasional *cuartel-manzana-calle* signs mentioned previously and house numbers. More than a third (262) of the houses had no numbers. Nearly every house had one or more sets of crossed sticks or slats above the doorway, which had been placed there on some festive occasion to hold colored paper streamers or other decorations in place. A number of houses in the outskirts (probably not more than 20) have two muleshoes nailed above the doorway with the calks or ends pointed upward in the traditional form to insure good luck and fertility. Nearly all recently erected houses, as well as many of the others, have 2 or 3 wooden crosses erected along the roof ridge or main axis (1 at each end, and the third in the middle). The crosses invoke a blessing on the new house, and are also considered by some individuals to be effective in keeping *rayos* or thunderbolts from hitting the house. Most of the places of business (shoe-repair shops, grocery stores, yardgoods stores, etc.) occupy one or two front rooms of the same house in which the proprietor and his family live. At one time all of the larger business places, as well as many

of the smaller, had a distinctive name painted in large colored letters somewhere on the front—usually just above the door. This name never was connected with the name of the owner, and seldom was indicative of the nature of the business. At present there are still visible such names as *Salón Tere*, *El Horizonte*, *La Luz*, *El Nuevo Paris*, *Unión Pacífico*, *La Esmeralda*, *El Page*, *La Barata*, *El Porvenir*, and *Buenavista*. These names represent the more or less modern equivalent (for a presumably literate public) of the colonial and early nineteenth century carved or painted emblems which could be understood by an illiterate people. Some of the defunct street names carry the memory of the older store names; e. g., the *Calle de la Campana* (present *Manuel Doblado*) got its name from a large bell which was painted on a store at the corner of *Doblado* and *Ramón Corona* more than a century ago. A few stores and the hotels and restaurants have modern names painted above the doorway or on a swinging board sign. These include the various tourist or “regional curiosities” shops, the *Botica Vasco de Quiroga* (a drug store), the hotel and restaurant *Atzimba*, the *Hotel Central*, and the *Posada Escobedo*.

Since there is practically no local vehicular traffic, and busses and automobiles from the outside do not pass more frequently than about five or six an hour, the bulk of pedestrian as well as animal traffic moves on the streets rather than on the sidewalks. However, the beasts of burden (principally burros, some mules, and a few horses) when going around a corner tend to conserve steps by cutting the corner as closely as possible. Since most of the packing by animals is from and to the north (busses and trucks are available in the other directions) there has been considerable attrition of the whitewash and of the adobe walls on the corners in the two northern *cuarteles*. It is only in those districts of town that stone corners (stone used instead of adobes in the corner portions of houses) and stone guards (*guarda esquinas*) are to be found. The typical *guarda esquina* is an elongated slab of stone, inserted in the ground about 1 foot out from the corner, which stands 4 to 5 feet above the street surface and absorbs the abrasive contact with fagots, sacks of charcoal and maize, building stones, bricks, adobes, tiles, etc. The streets are fairly open since only a few contain trees (planted along the sidewalks), and

the public utilities are few. There are only about 100 poles which carry electric wires from two transformers (one at the intersection of *Arteaga* and *Lerdo de Tejada*, and the other at the intersection of the *Plazuela de Bravo* and *Degollado*). Electricity reaches 44 of the 89 occupied “blocks” in Quiroga, and is utilized by 281 families and businesses in 239 houses. There are a total of 927 bulbs or “lamps” in Quiroga, of which 77 provide the illumination for the town. When street lighting began in Quiroga we do not know. There were *faroles* or lantern posts already erected on some of the principal streets and in some of the plazas when municipal records begin in the 1860's. By the 1880's there were 26 *faroles*, and the number had increased to 62 in 1899. Conversion from liquid fuel to electricity, provided by a wood-steam plant containing two direct-current dynamos, was made in 1906. At present the electricity (since September of 1942) comes from the *Bartolinas* plant of the *Comisión Nacional de Electricidad* near *Tacámbaro*. The only other impediments in the streets are some 30 telephone poles, which are restricted to the southern part of town. In 1878 the telegraph line reached Quiroga from *Pátzcuaro*; in 1893 conversion was made to telephone; and in 1899 the line was continued out *Carreras* and northwestward to *Coeneo*. There are only the State telephone office in the municipal building and one private telephone.

WATER SUPPLY AND PLAZAS

Two springs well up on the margins of the *Arroyo de Quiroga* (*Arroyo de Cutzaro*, etc.) some 1,500 meters north of the center of town. Two small concrete and stone houses (*cajas*) have been built over these springs, and the water is conveyed from them by a conduit of terra-cotta pipes or tubes which were laid in a shallow trench and covered with earth. This conduit or *cañería* runs along the west side of the arroyo to a brick diversion tank known as *La Alcantarilla del Aguacate* because of its location on the street of that name. From this *alcantarilla* metal piping laid on the surface carries water southwest to the cement water-basin or font (*pila*) in the center of the *Plaza de la Constitución*. The main water line continues in an underground terra-cotta *cañería* from *La Alcantarilla del Aguacate* eastward, is carried across the arroyo by an arch (which has

given its name to the nearby Calle del Arco), and continues diagonally southeastward to the brick *alcantarilla* in the Plazuela de Valle. From this tank metal pipes go southward in two lines: (a) By way of the *pila* in the Plazuela de Valle and the watering trough in Abasolo to the *pila* in the Plazuela de Bravo, and (b) down Ramón Corona to the *pila* in the Plaza Principal and on via the Calle Nacional to *pilas* in the Plaza de los Mártires and the Plazuela de Mina. The above-mentioned six *pilas* constitute all of the municipally provided sources of free water in town. Formerly there was a *pila* in front of the chapel of San Vicente, but the piping was taken out in 1928, and the fountain was removed in the 1930's when Benito Juárez was widened and paved. There are a few subsidiary pipe lines, some underground and some running on the surface of the streets and sidewalks, which carry water to a few homes and places of business. In 1945 only 65 buildings (of the 725 in Quiroga) had piped water, and 43 of these were in the two western *cuarteles*. The two districts or *barrios* known as El Calvario (north of Doblado, Valle, Cuerno, and Olivo) and El Pueblo Nuevo (east of Guerrero and Pueblita) have no piped water and no *pilas*. The bulk of the water for domestic use is carried by women and girls in *ollas* or water jars (carried both on the head and on the shoulder) from the nearest *pila* to their homes. Those who can afford it employ water-carriers or *aguadores* who carry 10 gallons of water from *pila* to house for 10 cents Mexican (10 *centavos*). These *aguadores* attach two 5-gallon kerosene cans or *latas* by cord or wire to the ends of a short pole which is balanced across one or both shoulders. The whole arrangement is known as a *maroma*. In recent years (due to deforestation, denudation, erosion, and accelerated run-off) the springs in the *cajas de agua* have not been able to supply the needs of Quiroga during the dry season. In 1945 the Pila de Mina dried up March 27; and by the 4th of April the Pila de los Mártires and the Pila de Bravo were dry, and the other *pilas* were low. In addition to the absolute lessening of water supply through increased run-off at the time of the rains, part of the difficulty in the town's water supply has been occasioned by the use of old tubes and pipes which lose a great deal of water through cracks and by percolation. The present *cañería* and *tubería* date from a renovation in 1878-84 and partial replace-

ment in 1923. The *ayuntamiento* in 1946 acquired some concrete piping and was attempting to obtain sufficient State and Federal assistance so that a complete new water system could be installed, including *pilas* or outlets for El Calvario and El Pueblo Nuevo. Besides the piped water and fountains, there are some other supplementary sources of water. There are 46 wells, varying in depth from 5 to 10 meters, which supply water to the families owning the wells (which are in the back yards). However, most of these wells run dry toward the end of the dry season (usually in April and May); a number of them have but a small supply of water at best; and the majority have polluted water which is used only for watering plants and laundering clothes. Most of the wells (34) are in the two lower *cuarteles* in the vicinity of the arroyos; three wells are on the southern margin of El Calvario; and four wells are in El Pueblo Nuevo. Most of the animals are watered at the trough on Abasolo, and practically no use is now made of the horse bath or Baño de los Caballos which is a circular brick and masonry basin 2 meters deep and 14 meters in diameter located just west of the Plaza de la Constitución and fed by several small springs. The slaughterhouse, some irrigated gardens and orchards, a public bathhouse, and several tanneries and tile and brick factories located in the western portion of town obtain their water by pipes from the spring of Atzitzíndaro and from the run-off of the several small springs that are in that area. The spring of Petatarío northwest of El Calvario is used by some of the residents of the northern part of El Calvario, and the spring of La Tepóricua is utilized by the people in the northeastern part of El Pueblo Nuevo. Most of the laundering of clothes is carried on at the various springs, and at several of the more permanent pools in the Arroyo de Quiroga and the Arroyo del Cerro Azul.

When the various plazas, *plazuelas*, and *pilas* were first established is not known. We have already discussed some conjectures concerning the main plazas. It is claimed that the two *alcantarillas* and a former *pileta* in the Plaza Principal near the sole bald cypress constituted the main elements of the town's water system a century ago. In 1857-58 the modern system was inaugurated, and on January 1, 1858, the *pila* and the 50-foot column with the statue of "America" in the Plaza Principal were dedicated. Between 1861

and 1862 the *portales* on three sides of this plaza were erected. These *portales* or arcades contain 41 arches and 11 main pillars of quarried stone from Tzirate; are floored with brick and tile; and have a tile roof over a ceiling supported by massive pine rafters or *vigas* which were renewed about 50 years ago. The shape of the Plaza Principal is that of a wedgelike quadrangle, 72 meters long from the Portal Allende south to the Calle Zaragoza, and tapering from 45 to 32 meters between the *portales* Hidalgo (on the west) and Matamoros (on the east). A narrow cobblestoned street flanked by a cement sidewalk encloses the central garden on three sides. Nineteen cement benches or *lunetas* (carrying the names of the donors—leading citizens and merchants, and dates between 1939 and 1943) and seven iron and wood seats are arranged along the inside of the sidewalk. Lateral and diagonal walks converge on the central area occupied by the statue of America, the cement fountain, and an elevated and covered *kiosko* or bandstand. This stand was erected in 1934 to replace an older one of 1894. Ash trees border the plaza, and in the parterres of the garden are a number of ornamental palms, banana plants, jacarandas, etc. About 1934 the garden within the Plaza Principal was named Jardín Belisario Domínguez, but scarcely anyone in town knows or uses this name. The Plaza de la Constitución (Plaza Vieja) is located on the north side of the Calle Zaragoza in the western portion of town. Occupied blocks are on the west and east, and ruins of adobe buildings are at the north side. The plaza is surrounded by a dirt street on three sides, and in the center is the *pila de agua*—a simple cement basin 9 meters in diameter. Numerous ash, cypress, willow, and poplar trees are along the Zaragoza frontage and irregularly distributed over the plaza proper, whose surface is of the natural earth. In the eastern portion there is an earthen basketball court. At present this plaza serves no special function. The Plaza de los Mártires, constructed in the 1860's on the site of the former municipal buildings just west of the parish church and *curato*, contains one *pila* and the only remnants of the metal *faroles* or lantern posts left in Quiroga. This plaza was paved with cobblestone in 1890–92 to improve it for use as a market place, which is its present function. Ash and privet trees provide shade and decoration and, at the

northwest corner adjoining the Calle Nacional, are a number of semipermanent kitchen stalls and general sales booths. The dimensions are about 65 meters north and south by 50 meters east and west. The Plazuela de Nicolás Bravo (earlier Degollado, and before that *de los Naranjos* from some orange trees which were torn out in the 1870's) occupies the small irregular space at the northwest corner of the Concepción Church, where Rayón, Aldama, Jiménez, and Degollado streets converge. There is a central small *pila de agua* (constructed in 1879) and a few jacaranda and privet trees. The Plazuela de Mina (*de los Negros*, and *de los Tecolotes*) is situated in the triangle where La Parroquia street intercepts the Calle Nacional, and Jazmín and Carreras enter from the sides. There are a number of ash trees and a *pila* built in 1867. The Plazuela de Valle occupies the area where Ramón Corona and Abasolo converge, and El Cuerno and Manuel Doblado enter from the west and east. Here is the master *alcantarilla* and by it a *pila de agua* and several jacaranda trees.

BRIDGES

There are 20 bridges and culverts in town, of which only 6 are formal bridge structures which are apparent as one traverses the streets of Quiroga. These structures are arranged in three lines or zones: (a) over the Arroyo del Cerro Azul and its tributaries in the eastern portion of town; (b) over the central Arroyo de Quiroga; and (c) over the drainage lines that descend from the northwest across the Plaza de la Constitución and near the spring of Atzitzíndaro. In age the bridges and culverts vary from such as the old single arch masonry bridge by the Abasto Viejo (which may be more than a century old) to the modern steel and concrete bridges built in the 1920's and 1930's by the Government along the route of the main highway. Many of the small bridges and culverts are little more than some logs or a few large stone slabs placed across the stream courses on the minor streets. The most interesting bridge is one of masonry and planking on the western tributary of the Arroyo del Cerro Azul where it flows across Guerrero, under a corner house, and across Morelos. There was no surface indication of this bridge excepting in the removable planks in the inside corridor of the corner house.

HOUSES AND SOLARES

In 1945 there were 725 buildings in Quiroga, of which 632 were inhabited, 10 were under construction, 43 were temporarily uninhabited or were abandoned, and the remainder were utilized as stores, workshops, storage places or warehouses, schools, churches, etc. The distribution by *cuarteles* was I—187, II—192, III—195, and IV—151. In the central *manzanas* the houses were built so that there was a continuous wall of varying height completely inclosing the block. Because of the great variability in shape and dimensions of the blocks any statement of average size or dimensions of blocks and of homesteads or *solares* would be misleading. We measured the frontage of every house and *solar* in Quiroga, and the most significant resultant fact was that houses and *solares* varied from as little as 4 meters in width to more than 50 meters. The majority of the house plots and houses ranged in width between 9 and 16 meters. Because of the lack of visibility and because we entered the interiors of the *solares* only when invited to do so (which was only in about 1 of every 12 houses), we have only a few measurements and estimates of the depth of the *solares* and lengths of the houses. It would appear that there has been some retention of the colonial depth or length of a *solar* (50 *varas* or 41.9 meters), but that the frontage has commonly been divided into about four parts. Perhaps the typical house plot is 10 or 12 meters in width by 40 to 42 meters in depth. It is obvious that in a completely occupied rectangular block the *solares* at and near the corners have been developed at each other's expense, while the *solares* toward the center of each side can extend approximately to the center of the *manzana*. The normal occupation arrangement on a *solar* is the house occupying all of the front portion (between one-quarter and one-third of the length), and the remainder constituting a backyard with fruit trees and ornamental plants, privy, poultry shed, etc. Only about one-seventh of the houses, usually in peripheral position, had contiguous seed plots or *sementeras*. About one in every four *solares* (187) had a livestock corral, which was commonly a fenced-off portion of the backyard. The most common fencing material, within and at the sides of the *solares*, was adobe bricks built into walls averaging about 7 or 8 feet in height. Toward the peripheries of town, walls

of stone and fences of barbed wire punctuated with *magueyes*, *colorines*, *chupires* and cactuses predominated. Privies of some type were present in 389 houses, and 336 had none of any description. The predominant type of privy or *excusado* was the simple one- or two-hole backhouse over a trench or pit, and only 12 were water-flushing toilets known as *moderno* (modern) or *estilo inglés* (English style).

Although a few of the buildings are of 2 stories (33 buildings including 2 hotels and the municipal building), the great majority (692) are of but 1 story. However, this represents quite an advance over 1884 when there were but 4 buildings in Quiroga with 2 stories. Twelve of these larger buildings are in *cuartel* I and the remainder are fairly evenly distributed through the rest of the *cuarteles*, but the actual concentration is in the 9 central *manzanas*. Sun-dried adobe bricks are the basic material of the house walls in all but 37 buildings (675 of adobes, 7 of adobe and stone, 5 of adobe and brick, 1 of adobe and straw, 1 of wood, and 36 of brick). The one wooden building is a modern plank shanty to house a highway employee on the margin of town. There are no Sierra Tarascan type wooden *trojes* except 3 or 4 small structures in back yards used as granaries. Practically all of the brick structures are along Benito Juárez and Zaragoza, and most of them are on the south side of these streets and represent the structures erected by the Government in recompense for the buildings destroyed in widening these streets for the highway. Adobe houses are popular because of their cheapness, durability, and good insulation qualities. Most of the houses are built of adobes made from the soil in the same *solar* in which each house was erected. This soil has about the proper proportions of clay and sand, and all that is necessary to add is some chopped straw or dried equine manure, and water. After proper mixing the adobe mud is shaped by packing into a wooden frame, then the adobes are dried in the sun for several weeks, after which they are stacked and allowed to season for a variable period of time. A shallow trench is dug where the walls are to be erected, and in this trench is built a masonry foundation which commonly extends about 6 inches above the ground level so as to keep the surface waters of the rainy season from contact with the adobe wall. Upon this foundation the adobe bricks are laid in staggered courses

(much as are brick walls in the United States) with adobe mud used instead of a calcareous mortar. There is a slight range in the dimensions of the adobes most commonly used, but the average size is 48 by 28 by 10 cm. (19 by 11 by 4 inches). The walls of older houses have adobes of about the same width and thickness but the length is about 56 cm. As mentioned previously, a majority of the houses have a protective coating of calcareous whitewash or mud plaster. Most of the buildings (541) have a 2-shed or gable roof (*techado de dos aguas*), although 153 houses have shed roofs, and 31 houses have a combination of 1 and 2 sheds. There are no flat roofs or *azoteas* because of the considerable rains in the summer. A framework or *armadura* of pine plates, posts, rafters, purlins, and ridgepole or *caballete* is tied in to the top of the walls, and upon this *armadura* is placed the roofing material. Practically all (711) of the houses are roofed with red tiles, and only 9 have roofs of *tejamanil* or shakes, and 5 roofs are of *zacate* or grass thatch. Up to the 1860's all of the roofs were of *tejamanil*. Probably a combination of increasing scarcity of timber, the need to reduce the fire hazard, and a desire to eliminate one of the hallmarks of Indian identity caused the drastic change from shake to tile which was nearly complete by the 1880's. The tiles used are the small 47-cm. curved tiles made locally in the *tejerías* on the northwestern outskirts of town. These are laid vertically with alternating concave and convex upper surfaces which overlap or interlock along a horizontal row which begins at the bottom of the roof. The next row up is laid in a similar fashion but projects somewhat over the lower row. This process is continued until the ridgepole is reached from both sides, and then the projecting tops are covered by tiles laid horizontally. As there are no fireplaces with chimneys or stoves with smokestacks, there is no need to provide exits for those items. Ceilings are present in a number of the houses, but they are definitely in the minority. This ceiling and the space above it commonly constitute a *tapanco* or attic or half story which is used for storage of maize and other items.

About half (350) of the buildings have 1 or more windows that give onto the street. These windows are commonly small and are closed by a single wooden panel. Only 50 of the houses have glass windows, and the majority of these are

protected by either iron or wooden grates or grills (*rejas*). Some 10 or a dozen of the houses have small balconies. The number of exterior windows per building ranges from only 1 (206 houses), through 2 (85 houses), 3 (29 houses), and so on up to 1 house with 17 windows. The majority of the buildings (467) have but 1 door that gives onto the street. There were 2 doors in 117 houses, 3 doors in 71 houses, and so on to 1 house that had 16 exterior doors. The doorways commonly have jambs and lintels of wood and sills or thresholds of stone or brick flush with the floor surface. A few of the houses have doorways and windows with stone jambs and lintels. All the doors are of wood, and commonly they consist of several loosely fitted planks held together by cross pieces nailed on the inside. However, the houses in the downtown or central section have carpentered and fitted doors which in a few instances are handsomely carved. Most of the doors are held in place by metal hinges, although a few have leather hinges. There are no doorbells of any description, but about 120 houses have simple ring knockers of iron or brass, and perhaps 8 or 10 have knob knockers of metal fashioned like paws, fists and simple clappers. Usually the front door opens into a room, but in perhaps 50 or 60 houses the 1 front door, or the central door if there are several, opens onto a *zaguán* or hall which goes through to the patio. Several of these *zaguanes* are paved with mosaic or colored glazed tiles. The majority of the doors have a metal lock which is operated with a very large key. In the poorer homes the door is closed from the outside by a cord or thong which is tied through the door and looped over a nail or peg projecting from the jamb. Practically all doors, including those with locks, are barred or double-barred on the inside when it is time to retire or when visitors are not desired. There are some 18 or 20 houses, all in the suburbs or peripheral areas, which are set back a way from the street and which are approached through a covered gateway known as a *portón*. These *portones*, which usually consist of an ordinary swinging gate of poles and withes or thongs, flanked by two posts which are surmounted by a small roof of tile or shake, are more common in Michoacán and Guerrero than in any other portion of Mexico although their use is increasing throughout the Republic. The function of the roof probably is to provide shelter

from sun or rain while the visitor is waiting for the gate to be opened or his call to be answered. Most of the houses (435) have complete or partial sidewalks of cobblestones; 111 houses have no sidewalk of any description; 89 have asphalt; 61 have cement; 26 have brick; and 3 houses have sidewalks of glazed tiles. From the above we get the picture of a typical Quiroga house as of 1 story, with a 2-slope roof of red tiles, cobblestone sidewalk, whitewashed adobe walls, 1 exterior door, possibly 1 or more windows, and no public utilities.

There are 5 arrangements of rooms which comprise more than nine-tenths of the houses in Quiroga. Our conclusions are based on data from all of the inhabited houses and several of the others totaling 650 buildings. The distribution of houses by number of rooms was: 224 with 2 rooms, 186 with 3 rooms, 74 with 4 rooms, 56 with 1 room, 50 with 5 rooms, 23 with 6 rooms, and 37 with 7 up to 30 rooms (this includes the municipal building and the hotels). This would indicate that the typical house has 2 or 3 rooms. This conclusion is not quite correct from the American point of view. In the United States we include living room, dining room, bedrooms, and kitchen (although not bathrooms) among the rooms of a house. In Quiroga there are practically no bathrooms or water closets (or closets of any other description) so such rooms do not enter the picture; but, in Quiroga, a kitchen is never considered to be a *pieza* or room. Usually the kitchen or *cocina* is a separate unit in the patio or at the back of the house, and consists of a shed roof (extending out from the back wall of the house or the side wall of the *solar*) and inclosed on two or three sides by walls of adobe, mud and wattle, matting or thatching, etc. Therefore, if a house is said to consist of two rooms this means that there are two completely roofed and inclosed units plus a kitchen and possibly other structures in the back yard, among which may be a granary or *troje* (in the original Spanish sense of the word). The most common house arrangement is of two rooms (both with a wall on the street if the *solar* is wide enough, otherwise with one room fronting the street and the other room giving onto the back yard or patio), with an open porch or shed at the back, in one corner of which is the kitchen. A nearly as common pattern merely adds a third room on one or the other side at the back to form an L-shaped house. In another arrangement a

fourth room is at the back, giving a U-shape to the house, in which case the kitchen leanto is commonly attached to the wall of one of the side rooms and the yard is effectively divided into an inner nearly inclosed patio which contains the flowers and ornamental shrubs and an outer yard which contains the outhouses and fruit trees. The one-room pattern normally has the kitchen occupying all of the back porch or veranda. Finally, there is the arrangement of five or more rooms which completely inclose a patio, in which case usually a *zaguán* leads directly from the street to the patio. This is the type that most closely approximates the Moorish Spanish house, and in a number of such houses there is a central well or font in the patio and a formal arrangement of ornamental shrubs and flowering plants in *macetas*. In approximately 400 of the houses the chief or only flooring material is brick; tamped earth constitutes the floors in about 290 of the houses; about 30 have cement floors; and only 5 have wooden floors. In perhaps 60 of the houses in which brick or cement floors predominate there are 1 or more rooms or parts of rooms with flooring of another material (brick and cement, brick and wood, cement and wood, brick and tile, etc.).

The function of the rooms depends upon the number of rooms present and on the size of the family. In the occupied houses or homes there is an average of more than 1.5 persons per room. If there is only 1 room it serves as combined living room, storage room, and bedroom. The most common arrangement (in houses with 2 or more rooms) is to use the front or "best" room as a parlor in which to receive people, as the location for the household shrine and any lithochromes and photographs the family may possess, and as a storeroom in which to keep the wooden chests which contain the best clothing and other treasured possessions. If there is a sewing machine or radio in the house it is usually kept in this room. In Quiroga in 1945 there were 194 sewing machines (100 pedal and 94 hand), 62 radios, 9 phonographs, and 4 pianos. Also, should guests stay overnight commonly they will be bunked down (on mat, cot, or possibly a wooden bed) in this room. The other room or rooms serve as bedrooms and (in the case of some handicrafts) as workrooms. Should the size of the family require it 1 or more persons may sleep on the back porch or in the kitchen. We did not take a census of household

furniture, but the 1940 census indicates that about 20 percent of the population sleep on mats (*petates*) laid on the floor, 74 percent sleep on beds (principally wooden frame beds with slats and no springs), and the remainder sleep on crude canvas cots or on planks or slats placed across wooden horses (this arrangement is called a *taperco*). Usually there is no separate dining room or *comedor*, and the people eat in the kitchen or at a table on the back porch or veranda. The most important fixture in the kitchen is the hearth or fireplace (*chimenea*), which usually consists of a solid platform of stone and mud (this is of cement or of brick in a minority of the houses), and an elevated back of the same material, upon which are placed the three hearthstones (*paranguas*) in the shape of a U. Quite often these three stones are plastered over with mud. The fire is built within the *parangua*; tortillas are cooked on a terra-cotta or metal sheet (*comal* or *erex*) which is placed directly above the fire; and the various cooking pots and kettles of terra cotta, copper, and aluminum are arranged at the edges. Other than this type of cooking equipment, there are perhaps 8 or 10 oil stoves and 4 or 5 wood stoves in Quiroga. Most of the homes use only cut sticks (*leña*) of oak and pine for cooking, supplemented by corncobs, twigs, refuse from the elaboration of wooden chairs and bowls, dried cow dung, etc. Other fuel used included charcoal in 60 homes, charcoal or wood in 53, and *tractolina* (crude distillate of petroleum) in 8 homes. Only the wealthier families in the center of town have stoves or use charcoal. As mentioned previously, 239 buildings have electricity, which is used in the homes only for illumination and the occasional radio (there are 2 or 3 electric irons); 389 homes use *petroleo* (kerosene); and the remainder use either candles or pitch-pine splinters (*ocote*) for illumination.

The present settlement pattern and the house types in Quiroga town apparently have little in common with their Tarascan predecessors. Although the pre-Conquest Tarascans lived in agglomerated settlements, it is certain that the organization in more or less regularly laid out streets and blocks was due to the Spaniards. Concerning the house styles and materials the evidence is not so clear. Our only evidence from the pre-Conquest period is provided by a few archeologic fragments, and by the illustrations and some casual

comments in the *Relación de Michoacán*. In an arroyo near the Yácata del Lindero northwest of Quiroga some archeologic material has weathered out which includes lumps of cooked earth which retain the casts and markings of wooden poles and grasses. These could indicate either thatched roofs or walls of wattle and mud. However, the accumulated mounds of large clods of cooked earth and stones of various shapes near the *yácata* would indicate that the walls were of mud (unshaped adobe) strengthened with stones, and probably the roofs were of thatch or wattle and mud. The illustrations in the *Relación de Michoacán* show houses of a rectangular outline that seem to have roofs of both two and four sheds or slopes. The wall material is indeterminant; while some of the roofs seem to be of grass thatching, others have the appearance of shakes. In the text of the *Relación* there is mention of wooden houses. The situation at the time of the Conquest was probably that the majority of the houses were of stone and adobe walls with thatched roofs, but that some of the houses were of hewn plank sides and shake or small plank roofs. The accounts of the sixteenth century (*Relaciones Geográficas*; ^{1a} Sahagún, 1938; and Ponce, 1872) concerning the Tarascan settlements are practically unanimous that the walls were of adobe and the roofs were of grass, although a few wooden houses are mentioned in the first and last sources listed above. Apparently the shapes, sizes, and materials of the houses continued the same after the Conquest as before, but stones were used primarily in the foundations, the adobe mud was shaped into Old World forms of adobe bricks, and the working of wood was made somewhat easier by the introduction of steel axes and adzes. Before the end of the eighteenth century, in those Tarascan areas that had an abundance of pines, the houses came to be predominantly of wood (shake-covered four-shed roofs, plank sides, and wooden floors) of the style known at present as the Tarascan Sierra *troje*. Although we believe that this style of house dates back to special houses used by the priests in pre-Conquest times (on the basis of textual material in the *Relación de Michoacán*), it is believed by some to have been introduced in colonial times by Mexican and Spanish missionaries upon their return from so-

^{1a} See Bibliography, Manuscript materials, Mexico City, Museo Nacional de Antropología, Fondo Francisco del Paso y Troncoso.

journals in Japan. At any rate, some or most of Quiroga's houses were of this type at the close of the colonial period. After the village was burned to the ground in 1811 it was probably too great a task to cut and hew all of the timber necessary to rebuild the houses entirely of wood, so the walls were made of adobes and only the roofs were of shakes—as reported by Romero (1860-63). The present two-shed tile-roofed houses with adobe walls and floors of brick are definitely European. However, those houses which consist of three units (a combined livingroom-bedroom, a kitchen, and a storeroom) are functionally as Tarascan as they are Spanish. The furniture of the houses and the plants and animals in the patios are a mixture of the two cultures, with a majority of the items being of Old World origin. The native sweat-house has been completely eliminated, although the occasional bread oven in the backyard is somewhat reminiscent of its shape; the shape of most of the granaries is quite probably non-Indian; and the animal corrals and *excusados* are definitely Old World.

LAND OWNERSHIP

FEDERAL, STATE, AND MUNICIPAL LANDS

The lands in the municipality of Quiroga belong to the Federal Government, the State Government, the municipal government, the Indian agrarian community, and to individuals. Within the Villa de Quiroga and its ranchos the National Government has theoretical title to the subsoil minerals, to Lake Pátzcuaro and its permanent tributaries (nationalized in 1920), to the churches and chapels and lands which they occupy, to the federalized rural school "La Redención" which occupies the former chapel of San Miguel (the town school, although Federal, is on private rented property), and to the line which brings electricity from Tacámbaro. In actual practice Federal ownership of lands and buildings in Quiroga is insignificant. All Federal employees (such as teachers, doctors, post-office workers, highway workers, etc.) own privately or rent their offices or places of business; e. g., the postmaster owns the building in which the post office is housed. The nature of State claims to land ownership is somewhat uncertain, but apparently the nearest State property is the Balneario de Chupícuaro near Santa Fe. State employees, such as the tax collector, have their offices in

buildings which they own privately or rent. The State does own the telephone line. The municipality as a legal entity owns the public roads and bridges, the streets and plazas, the water system from the *cajas de agua* to the *pilas* and including the pipe lines into private homes (theoretically the Arroyo de Quiroga and its waters belong to the Federal Government), the cemetery, the slaughterhouse, the municipal building, the poles and lights of the town lighting system, and a few small scattered pieces of property within Quiroga town which were valued in 1941 (on the State tax rolls) at 765 pesos.

The cemetery or *panteón municipal* was built in 1850 to take the place of the old and crowded cemetery in front of the parish church. It is situated at the very northeast corner of town, by the Arroyo de Cerro Azul and just below the spring of La Tepóricua. The main portion, which is enclosed by a high adobe wall, measures 104 meters along the western side by 93 meters in width. The only entrance is through an ornate gateway at the southwest corner. Within the main precincts are a centrally located chapel built in 1890-92 which is now roofless and in ruins, the majority of the graves, and all of the ornamental trees and shrubs. In 1879 an addition was purchased which occupies the triangular area between the walled cemetery proper and the arroyo to the east. This area has an uncertain number of unmarked graves (it is essentially the "potter's field"), and is overgrown with weeds and brush. The main *panteón* is extremely unkempt, with weeds everywhere, many graves gutted, headstones askew, etc. The oldest date we could locate was 1861, but a number of the dates were illegible, and many of the headstones had been re-used. The most pretentious monument was that over the grave of Colonel Jesús Villanueva (a hero of the Wars of Reform and the French Intervention), but most of the graves were marked by a simple wooden cross.

The present municipal building or Palacio Municipal in the second block of *cuartel* I, just south of La Concepción church, occupies all the area from the 46-meter frontage on the Calle Nacional back to Calle Degollado. The lands upon which it was erected 1884-1904 were a part of *La Guataperera* or hospital which belonged to the Indian community as late as 1869. Some time between 1869 and 1873 the lands of *La Guataperera* were ac-

quired from the Indians by a white merchant, Mariano Lavarrieta, who gave these lands (valued at 245 pesos) in July of 1873 to the *ayuntamiento* to be used as the site for the proposed new municipal buildings. The old buildings had been destroyed in the 1860's and their site was converted into the present market plaza across the street by the parish church. Apparently Lavarrieta had acquired part or all of *La Guatapera* lands by fraud, and a lawsuit between the Indians of the *barrios* of San Bartolo and San Francisco and the *ayuntamiento* lasted until December of 1877. Ultimately the Indians were given some satisfaction, and work on the municipal building began in 1884. Gifts by individuals, the proceeds of fines and of bullfights, work by prisoners, and several State subventions slowly provided the means for erecting the building, which was sufficiently completed by February of 1895 that the *ayuntamiento* could install its offices and archives. For the previous thirty-odd years the *ayuntamiento* had been forced to rent its quarters. The building consisted of massive 2-story adobe walls, tile roof, and some 20 rooms facing in toward a completely inclosed central patio or courtyard. Stone quarried on the slopes of Tzirate was used in the construction of the doorways and the interior stairs (which were completed in 1899), and iron bars and grills were placed over the windows and in front on the balconies. There is evidence that the building was never completely finished, and at present some of the rooms have been allowed to acquire a ruinous state. The municipal building houses the *presidencia* (office of the president and of the secretary) and the jail and quarters of the police on the ground floor; and on the upper floor are the Registro Civil (together with the office of the State telephone line), Tesorería Municipal, and Juzgado Menor. Also, at the back on the ground floor is a corral and some rooms used as dwellings.

The one municipal structure that has not been described is the slaughterhouse or *abasto municipal*. There have been at least four *abastos* in the history of the town, the last of which was constructed in 1925 on the north side of the Calle Zaragoza in the last block of town going west. It consists of a 1-story adobe-walled and tile-roofed building in the shape of an L, with the upper limb of the L being a shed covering a cement floor. Two cement water troughs, 10 large meat hooks, and an adjacent corral complete the inventory of the *abasto*. The

previous *abasto* (now known as the *abasto viejo*) was located at the southeast corner of town, just west of the Arroyo del Cerro Azul and the bridge on the road to Zirandangacho. A flood August 14, 1900, washed this *abasto* away, but it was rebuilt the following year and continued in use until 1925. At present it is a group of roofless adobe ruins which have been partly washed away by the arroyo. Although installed on the church of La Concepción (which is Federal property), the clock tower is municipal. The large four-faced clock was installed June 29, 1895, on top of a tower some 25 meters above the ground level, and at a cost of 3,325 pesos (as compared with the 5,000 pesos total cost of the municipal building).

THE INDIAN COMMUNITY

The present Comunidad Indígena de Quiroga is a lineal descendant of the República de Indios de Cocupao of colonial times. This community, as was true of the other Indian towns in Mexico in colonial times, comprised lands owned by the community as a whole and private lands owned by individual Indians. Throughout the colonial period the communities and the individual Indians were allowed to sell their lands to other Indians, to mestizos, and to whites, under certain conditions. By the nineteenth century such sales had cost Cocupao much of its lands. Communally owned lands and individual contributions provided the money that went into the Cajas de Comunidad (strongboxes which served as the repository of community monies and papers) which were present in every Pueblo de Indios. Out of the monies accumulated in the local *caja* (or *arca*) came the tribute to the crown and the expenses of the local church and hospital. Toward the end of the colonial period the bulk of the community funds were absorbed by religious expenditures. The administration of the *cajas* became so notoriously bad that viceroy Revilla Gigedo in 1773 ordered a general inspection. Although we have seen a number of inspection *informes* for communities in Michoacán, unfortunately we were not able to locate any for Cocupao nor were we able to locate any of the titles and records that theoretically once were in the local *caja*. Therefore we have no record of the landholdings toward the end of the colonial period and during the first decades of independence. In 1810 the Indians ceased to pay tribute to the crown, and in 1813 the viceregal

government commenced a movement for the breaking up of communal lands, excepting the necessary commons or *ejidos*. After independence was achieved the republican government (at least in Michoacán) reinitiated the partitioning of communally held lands, in 1828; however, apparently not much progress was made. In 1856 the so-called Ley Lerdo terminated legally the ownership of lands by religious and civil corporations. This was the real beginning of the almost complete loss of lands by Indian communities since no distinction was made (nor was it possible in many cases) between the lands of the Indian community and the lands of the municipal corporation. The Indian communal lands and the municipal *ejidos* were partitioned among the members of the community, or among the tenants and renters of the lands, and also were sold to individuals from outside the community. Federal and State laws facilitating such allotting or partitioning of communal lands were passed in such years as 1872, 1877, 1883, 1892, and 1902. A Michoacán State law of September 27, 1877, completely extinguished *comunidades de indígenas*. Despite all of these laws the Indian communities of Santa Fe, San Jerónimo, and San Andrés, and Quiroga to a lesser degree, maintained their identities and a certain amount of communally possessed lands until about the turn of the century. Apparently in Quiroga between 1856 and 1872 the Indians did allot most of the communal lands to individuals, and a final *reparto de bienes de la comunidad* was made in 1878. A number of these individual Indians sold their lands to non-Indians, as in the 1871-72 sales of the lands that were converted into the Pueblo Nuevo and the sale of the *guatapera* at about the same time. Such sales left the Indian community and individuals with little land excepting from La Tepóricua and the Barrio del Calvario northeastward into La Tirímicua. It is of interest that in the 1890's, possibly aided by the law of 1892, a non-Indian (Gerónimo Ponce) acquired control of most of La Tirímicua. For all practical purposes the Indian community of Quiroga did not exist after 1902 until the passage of the first agrarian law in 1915 and the adoption of the Federal and State constitutions of 1917.

According to inhabitants of El Calvario the history of the Indian community has been as follows: Formerly the only inhabitants of Quiroga were the ancestors of the present inhabitants of

the Barrio del Calvario, who lived in the area around the old cemetery and the hospital (*la guatapera*). However, there finally came a white man to Quiroga, who gave the Indians much hard liquor to drink and who told them that if they needed money he would be glad to lend it to them. Under the influence of liquor, or spurred by economic necessity, many of the Indians obtained loans which were always secured by mortgages on lands. Almost invariably the Indians were unable to pay back the loans, and in this manner the inhabitants of the *guatapera* were dislodged from the lands in the center of town and were forced to move up the hill to what is now the Barrio del Calvario. From great antiquity (the accounts that have been summarized were extremely indefinite as to chronology) the inhabitants of El Calvario have fought with the inhabitants of El Centro (the downtown or central part of Quiroga) because the latter tried to take away the remainder of the lands of the Indians, attempted to rule and to dominate the Indians, and discouraged their attempts to become educated. The parish priest was always in league with the "judge" to subjugate the Indians. In former times the Indians or Comunidad Indígena del Calvario had a representative who was elected for life by the members of the community. The last several (*los últimos representantes*) of these representatives began to sell pieces of land to the whites (*gentes de razón*), and in this fashion the Indians were displaced from their ancestral abodes in the center of town and elsewhere. The position of *representante* disappeared about 1910, with the Madero Revolution. An almost immediate result was that the inhabitants of Sanambo (backed by the people of El Centro in Quiroga) began to claim lands that belonged to the inhabitants of El Calvario. However, the people of El Calvario were able to retain their lands through fighting, and because of the complete unity within the Comunidad Indígena. This unity was never threatened until the coming of *agrarismo* (attempt to make use of the agrarian law of 1915), at which time the town priest divided the inhabitants of El Calvario into two parties by excommunicating those who were known to be *agraristas*. The "atheistic" agrarians and the good Christian members of the *comunidad* almost came to blows, but ultimately the dissension was settled peacefully—principally because of the forbearance of the agrarians who were in the majority.

At present, so they claim, all but five heads of family in El Calvario are active agrarian members of the *ejido*, and these five are not members because the priest has told them that they would be damned forever should they receive lands from the Government. Effectively, the heads of family in El Calvario constitute the Comunidad Indígena and also the *ejidatarios* of the Ejido de Quiroga. The members of the local *ejidal* administrative committee are considered to be the representatives of and spokesmen for the Indian community of the Barrio del Calvario in both internal and external matters—whether political or pertaining to lands. It thus appears that the Ejido de Quiroga and the Comunidad de Indígenas de Quiroga are today one and the same entity.

THE EJIDO DE QUIROGA

In 1915 two men, representing the Barrio del Calvario and the extinct Comunidad de Indígenas de Quiroga, petitioned the Governor of Michoacán (in accordance with the agrarian law of January of that year) for a restitution of lands formerly held or claimed by the Comunidad de Indígenas de Quiroga. These claimed lands were in the possession of individuals in Santa Fe, Tzintzuntzan, Patambicho, Corrales, Atzimbo, and Quiroga, and in many instances had not been in the possession of Cocupao-Quiroga for more than 300 years. At this time (1915–16) it was stated that the community of Quiroga held no community lands. In May of 1918 the petitioners from Quiroga admitted that it was impossible for them to present all the necessary documents to obtain restitution of usurped lands, and they changed their petition for restitution to a request for a grant of new lands (*dotación*). The agrarian committee in Morelia made the change to a request for a *dotación* in January of 1920. Then there was an unexplained lag of 9 years until August of 1929 when a census was taken of the Calvario community which showed only 36 men with rights to a *dotación*. In October of 1929 the engineer representing the National agrarian committee confirmed the results of the census, and projected a tentative *ejidal* grant on lands belonging to the Spanish Berrueco brothers in the Hacienda or Rancho de Sajo, to Sra. Beatriz Palacios Viuda de Ponce in La Tirimicua, and to Sra. Soledad Tovar Viuda de Villanueva that

were scattered in Icuácato. In November of 1929 the Governor of Michoacán resolved in favor of an *ejido* of 217.5 hectares taken entirely from the Berrueco lands in Sajo, and provisional possession was given the *ejidatarios* on December 17, 1929. Although a local administrative committee (*Comité Particular Administrativo Agrario del Ejido de la Villa de Quiroga*) was organized in December 1929, apparently there was little activity on or concerning the *ejido* until 1931. In June of 1931 the *ejido* boundaries were surveyed (a poor job); crops were planted, harvested and accounted for to the agrarian administration; a census was taken in April which showed 78 individuals with rights to obtain or participate in a *dotación*; and on October 11, 1931, a presidential resolution confirmed the *ejido*. Definitive possession was granted on April 10, 1932, by which time the *ejido* had been extended to include 606.38 hectares (565.68 from the lands of the Berrueco brothers, and 40.70 from the lands of the widow of Villanueva). Presumably each *ejidatario* (of the 78) had a parcel of 5 hectares of good dry-farming land (*temporal primera*) or 8 hectares of second-class dry-farming land and brush land (*temporal de segunda y monte alto*). A careful survey March 9, 1934 (at which time permanent monuments were placed on the boundaries of the *ejido*), showed that the majority of the *ejido* comprised the nonarable lava flow or Malpais de Icuácato. Presumably the *ejido* contained 16.70 hectares of *temporal de primera*, 216.40 hectares of *temporal de segunda*, and 373.28 hectares of *monte alto*, which works out almost exactly the theoretical proportions of each class of land that should be available per *ejidatario*. The *ejidatarios* of El Calvario estimate that each one does not average more than 20 litros de *sembradura de maíz* (a variable acreage because of differences in spacing of the seed and numbers planted, but in no case amounting to more than 2.5 hectares of arable land). Consequently the *ejidatarios* must supplement their agricultural income by making *bateas* (wooden bowls) and doing other types of work that may be available when they are not occupied with their fields. In 1935 the *ejidatarios* requested an extension of lands (*ampliación*) at the expense of some of their large landholding neighbors from El Centro, but these landholders protested that they owned only small properties that were within the maximum limits set by the agrarian code.

This matter dragged along until 1938 when another *ejidal* census was taken (which showed a minimum of 60 individuals with *ejidal* rights), and a presidential resolution was issued in favor of the *ampliación* provided that no innocent or "immune" third parties were injured. The authorized expansion was never carried out because there were no available lands (*por imposibilidad material*). At present the 68 *ejidatarios* farm between 75 and 150 hectares annually in the arable lands of the *ejido*, which are all in Icuácató at distances between 3 and 7 miles by trail from El Calvario.

The history of the local administration of the *ejido* has been quite eventful. The first definite organization was the three-man (president, secretary, and treasurer, and their *suplentes* or alternates) administrative committee which functioned from December 1929 until October 1932. The lands were apportioned in a fashion that was unsatisfactory to many who did not belong to the ruling clique (composed of Leocadio Martínez and various members of the Valdovinos, Peña, Chagolla, Flores, Anita, and other families), and apparently only about 40 out of the 78 *ejidatarios* were able to harvest crops of wheat in June and of maize in December of 1931. On October 4, 1932, a new committee was elected by 53 active *ejidatarios*, which committee functioned until February of 1935. In 1932 the agrarian committee obtained the chapel of San Miguel for a headquarters building, and in October of that year local gangs (recruited from the *peones* or laborers for the large landowners in the area) led by men who had participated in the Cristero Revolution of the 1920's terrorized the *ejido* with the tacit support (so the *ejidatarios* claim) of the incumbent municipal president. In February of 1935 a new committee was elected (now termed *Comisariado Ejidal*) which functioned until January of 1939. This was the period of attempted expansion, of a State-imposed municipal government (1935 to 1937), of agrarian domination of the municipal council (beginning with José Jesús Chagolla who succeeded the assassinated *presidente* in May of 1937), of much fighting between the people of El Centro and of El Calvario, and of several assassinations including Leocadio Martínez in December of 1938. In 1938 the administration was partly reorganized to include a supervisory or vigilante committee (*Consejo de Vigilancia*) which

also consisted of a president, a secretary, and a treasurer. The two committees elected in January 1939 (for a 2-year period) ran into much difficulty with numerous complaints of lack of equity among the allotments or parcels of land. Especially obstreperous were seven *ejidatarios* who controlled good land out of all proportion and who refused to obey the administrative committees. In 1939 a cooperative was formed (*Cooperativa Forestal Quiroga*) to work the forest products (wood for *bateas*, charcoal, turpentine, lumber, etc.) in the *montes* of the region which were under the supervision of a forest inspector representing the Federal Government. Conditions quieted down somewhat in 1940, and the history to date has been comparatively quiet and bloodless. At present the administrative committees are elected for 3 years (1941-44, 1944-47, etc.). The administrative group (*Mesa Directiva*) while we were in Quiroga was composed of 12 men elected by the *ejidatarios*, and comprised the 3 members of the *Comisariado Ejidal* and their 3 alternates (President—Pedro Valdovinos and Maximiano Valdovinos; Secretary—J. Carmen Chagolla and Indalecio Chagolla; Treasurer—Martín Flores and Fortino Salmerón), and the 3 members of the *Consejo de Vigilancia* and their 3 alternates (President—Jesús Chagolla and Miguel Valdovinos; Secretary—Felix Flores and Basilio Peña; Treasurer—Rómulo Flores and Pedro Ruiz). The chief function of the *Consejo de Vigilancia* at present is to see that each *ejidatario* farms his parcel in a proper manner.

The title to the *ejidal* lands is vested in the community known as the Ejido de Quiroga. This land is inalienable. The regular State land tax is paid by the community, but apparently only a nominal acreage has been declared for the arable portion of the *ejido*, since the tax rolls carry a listing of only 75.34 hectares (valued at 9,099 pesos) out of the 606.38 hectares in the entire *ejido*. The *ejidal* lands consist of commons (pasture lands and woodlands) and of the parcels which have been allotted to the individual members of the *ejido*. Certificates of allotment are issued to each *ejidatario*, and these individual allotments are registered in the National Agrarian Registry. Theoretically every unmarried male over 16 years of age, every married man regardless of his age, and every woman who is the head and support of a household, is a member of the *ejidal* corporation

and is entitled to a parcel. However, no individual may acquire more than one allotment or parcel, even by marriage or inheritance. Since there is not enough arable land available to make allotments to all who are eligible, allotments are made in conformity with the agrarian code which gives preference according to age, size of family, length of residence, and other factors. The unmarried boys between 16 and 21 and the old single men over 50 are at the bottom of the eligibility list. Practically speaking the certificates of allotment constitute titles, and the parcels can be transmitted from father to son (providing that the son does not already possess an allotment). However, protracted absence from the community, unexcused failure to cultivate the parcel, and a few other reasons are cause for the parcel to revert to the community to be reallocated to the person at the head of the waiting list of eligibles. The *ejidatarios* of Quiroga do not reside on the *ejido*, and a number of them possess private properties—which they may do, providing that the area of the private holding is less than that of the allotment. Six residents in El Calvario own rural property, and 52 own urban property—and most of these owners are also *ejidatarios*.

INDIVIDUAL PRIVATE PROPERTY

The remainder of the property in Quiroga belongs to individuals. By law the church may not own property, and no agricultural landowning corporations are allowed, excepting the *ejidal* community. However, two or more farmers may own jointly a small piece of property which they farm collectively.

LAND REGISTRY AND TAXATION

All of the real estate in Quiroga and its municipal area theoretically (according to the Federal and State constitutions) must be recorded in the local tax office. At the time of initial recording or listing the pertinent papers (*escrituras* or *títulos*) must be presented for inspection. These papers are commonly of four types: (1) a few individuals from Quiroga (none to our knowledge) may have inscribed their lands (after proving a clear title) in the *Gran Registro de la Propiedad* in Mexico City and, if so, would have certified copies of the inscription; (2) a few property owners in Quiroga have registered their titles in the State *Registro*

Público de la Propiedad in Morelia, and have certified clear titles; (3) the majority possess *escrituras* (bill-of-sale or transfer of property) executed before the local *juez menor* (at which time a *comprobante* or voucher would be made out by the judge and sent to the tax collector's office) or notarized at some *Juzgado de Notaría Pública* in Morelia or other large city; and (4) a few individuals have titles that were executed during the colonial period. Periodically, during the colonial period and more recently, titles to all properties were inspected and lists or *padrones* of properties and taxpayers were compiled for the guidance of the tax collectors. In Michoacán titles were vindicated and registered in 1843, 1867-71, and in 1915. There are still a few Quiroga titles that are in the pre-1915 status, and many pieces of property that have been acquired since 1915 by purchase or long undisputed occupation have not been declared. Each year there appear on the tax rolls several pieces of property with the notation "not listed previously" or "unknown to the treasury" (*ignorado del fisco*).

All taxes on real estate are collected in the State tax collector's office (*receptoría de rentas*) in Quiroga town. The present office is in a private home on Calle Ocampo. The State is divided into a number of tax districts, one of which has its headquarters or *administración* in Pátzcuaro, and Quiroga depends from the Pátzcuaro office. The *receptoría* in Quiroga directly covers all of the present municipality of Quiroga, and *sub-receptorías* in Tzintzuntzan and Teremendo are attached nominally to Quiroga. The Quiroga office consists of one dark unlighted room, several desks, tables, chairs, and bookstands, and the archives. The staff consists of the *receptor* or *recaudador* (tax collector) and two assistants who look up records and make entries in ink. In recent years at least none of the tax collectors has been a native of Quiroga, and their stay is commonly only a few years. The previous tax collector was in Quiroga from 1941 to 1945, and the present tax collector (Don Antonio Castellanos Mendez) took over April 8, 1945. Although the tax office in Quiroga was a going concern in 1843 (and possibly as early as 1824), the archives contain no records earlier than 1907. The records consist of three chronologic groups of large leather-and-board bound volumes. Each group comprises 2 series of separately numbered volumes: 1 for urban properties

(*Prontuario de Fincas Urbanas*), and the other for rural properties (*Prontuario de Fincas Rústicas*). The oldest group contains 11 volumes for *Fincas Rústicas* (and 2 tomes of indices) which cover the fiscal years 1907–08 to 1915–16, and 11 volumes for *Fincas Urbanas* (and 2 tomes of indices) which cover the fiscal years 1908–09 to 1915–16. The fiscal years are numbered from the end of the French Intervention, and the seventh-eighth fiscal year was 1945–46. From many of the volumes in this group numerous folios are missing, and in other volumes the folios are so torn, crumpled, insect-and-rodent-eaten, and weathered, that the records cannot be deciphered. The second group comprises the two new series (7 tomes of *Urbanas* and 6 tomes of *Rústicas*) which were initiated with the *manifestaciones* of 1915 when most property owners brought their accounts up to date and presented their titles for inspection. In general this group covers the fiscal years 1915–16 to about 1928–32, although a few open accounts were maintained until 1943. In 1926 all the books in the first two groups were checked to help with the starting of the current group of continuation books (*Urbanas* commence with volume No. 8 and run up to No. 16, and *Rústicas* begin with No. 7 and run up to No. 13). At the beginning of each new group and series the numeration of accounts begins with 1 and the seriation or numeration is continued until the group or epoch is finished. Each number stands for one account which occupies two opposing pages. The number of years that any given account may stay under a particular number depends upon how rapidly the space on the two pages is used up by movements of property, payments of taxes, etc. As soon as all the space has been used up the account is transferred to the nearest unused number, which usually is in another volume. A notation of the new number is made at the bottom of the finished account pages, and in the new account pages a notation is made of the old number. In this fashion one can trace any given account back through the different volumes. We made a careful study of only the recent volumes of *Fincas Rústicas*, and we found that by the time we had worked back through volumes 13, 12, 11, and 10 (the numeration actually was in roman figures) we had covered nearly all of the effective and open accounts. There were only nine effective accounts in volume 10. The old numeration of accounts (which carried up to No.

2163 in volume 11) was succeeded in volume 12 by a new numeration which commenced with No. 1 in 1941. This was due to a revaluation or tax assessment board (*Junta Valuadora de Catastro*) which operated from 1940 to 1943. This board, made up of local citizens, circulated a form in 1940. On the basis of the information contained in the forms that were filled out and returned (only a minority of landowners did this) the board revalued lands in 1941–43. There no longer is a board in Quiroga, and the tax collector must make the assessment or appraisal of the value of each property himself. However, in actual practice the tax collector never visits any of the properties, and he merely takes the valuation submitted by the owner—which valuation normally has not changed on the books for the whole period of record which may be a matter of 20, 30, or more years.

The theoretical full account entry contains the name of the owner and his address (if outside of Quiroga); the name and location of each of his pieces of property; the metes and bounds of each piece of property or *predio*; the hectareage, classification, and valuation; the name of the last previous owner and the date of transfer; and the dates, rates, and amounts of taxes paid. In actual practice the current open account contains little more than the name of the owner, the location of the pieces of property, the valuation, and the taxes paid with dates. In order to obtain the full information it is necessary to run back through several volumes, and even then the information practically never is complete. Every field, slope, hill, mesa, plain, and other natural or artificial division of the landscape has its own proper name, and quite often the location of a *predio* will be given in such terms as *Terreno en La Palma* (Land or field in La Palma), *Fracción del Capulín* (a fraction or part of El Capulín), *Sin nombre en Caríngaro* (Without name in Caríngaro), etc. Unfortunately the same field name may occur several times in the different parts of Quiroga; e. g., there are five areas with the name La Palma, and El Fresno occurs in Atzimbo, Caríngaro, and Sanambo. The metes and bounds seldom are given other than at the time of first inscription of the property. Two inscriptions will serve as illustration (translated rather literally):

1916. Property of the Mesa and Top of the Cerro Azul of Pablo Torres Arroyo. On the east (it borders)

with Rafael Barriga, Pedro Herrera, and Vicente Torres, wooden fence between; on the west Diego Fuentes Aguilar and Rafael and J. Jesús Rivera, stake fence between; on the north with Efrén and Onésimo Chagolla and with the Comunidad El Calvario, fence between; and on the south with Agustín Ponce and with the borders of the ranchos of Caríngaro and Atzimbo, fence between.

1945. The piece of property here considered is named "Los Conejos," with an estimated area of 10 hectares of hilly pasture land and borders: on the east, with the heirs of Antonio Farías, fence in between; on the west, with heirs of the same Señor Farías, fence between; on the north, the same Farías heirs and J. Encarnación Medina, fence between; and on the south, with the above-mentioned heirs of Farías and Epifanio Rangel, fence and road in between.

There is no general survey system with points of reference on a rectangular grid. Between the adjustment of property lines to conform with natural features such as water divides, stream lines, and lines drawn between two hills or rocks or trees, and the breaking up of properties through purchase and inheritance, there are very few pieces of property that can be bounded by straight lines. Consequently it is difficult to describe boundaries accurately, and to estimate or determine areas. It would seem worth while for the Mexican and State governments to survey and mark a number of base lines and principal meridians, spaced perhaps a hundred kilometers apart, and then (as time and money permitted) to survey townships 10 km. square with monuments every kilometer. This would afford enough of a grid and points of reference so that eventually every piece of property could be described with reference to the rectangular coordinants.

Owing to the difficulty of description and estimation of area very seldom does an inscription contain either the area in hectares or a classification of the lands involved. In the tax rolls from 1907 to 1932 hectareage was not given. Since that date less than one-half of the records indicate the areas involved by *hectáreas*, *áreas*, and *centiáreas*; a few express area as a fraction of a named field ($\frac{1}{2}$ of La Estacada, $\frac{3}{4}$ of El Rosario, etc.); and the majority have no expression of area in any form. An inspection of the records revealed that in many instances where the hectareage of a given piece of property had been stated at some time, and later the same *predio* had been sold or surveyed (in connection with the agrarian confiscations of the 1930's or the revaluations of the

1940's), the initial statement of area was commonly less than half the true area. Evidently this was one manner of evading or reducing property taxes. In less than one-tenth of the inscriptions are the types or classes of land given. There are four major classifications of lands, each with several subdivisions. The best lands are those with water for irrigation (*tierra de riego*), or with ample natural moisture (*tierra de humedad* or *de jugo*), and such lands are valued at 400 pesos and upward per hectare. In the second grouping are arable lands that are cultivated by dry-farming and dependence upon the summer rains (*tierra de temporal*). Such lands are divided into three classes locally: good or *primera* valued between \$170 and \$250, fair or *segunda* valued from \$100 to \$150, and poor or *tercera* valued between \$70 and \$80 per hectare. The most common valuations are \$100 and \$80 per hectare. The third and fourth groupings intergrade and consist of pasture lands (*tierra pastal*), hilly and wooded pasture lands (*pastal cerril*), and lands practically useless from an agricultural point of view which are to be found on the steep and eroded or heavily wooded slopes of hills and mountains (*cerril*) and on the lavafloes (*malpais*). Such lands are valued between \$10 and \$30 per hectare. The valuation of lands for tax purposes is usually about one-third or one-fourth of the real or sales value. When a sale is made very often the actual cash that changes hands will be several times the declared value on the tax rolls, but the latter figure is commonly the one that appears on the bill-of-sale or *Escritura de Compra-Venta*. Sometimes even this figure is reduced by the secretary of the local court (for a bribe or *mordida*, for friendship, etc.) so that not so many Federal tax stamps (*timbres*) will be required for the *escritura*, as well as to reduce future taxes. On the inscription of account in the tax rolls the total valuation of the properties of each person is always made to terminate in aught (*aumenta para terminar en 0*; e. g., 744 is raised to 750). This total valuation is referred to as the "capital." Up to about 1938 the livestock on property were included as *capital mueble*. After the initial inscription, which may have been many years and volumes earlier, the account may be forwarded with no other information than "Capital" worth so-many pesos, and additions and subtractions by purchase and sale of pieces

of property are indicated merely by addition or subtraction of the money presumably involved. Considering the underestimations of areas and values the tax rates are not high. In recent years (1940-43) the rate was 12.50 on the thousand, and at present (1944-) the rate is 13.50 pesos for each 1,000 pesos of capital. Despite the fact that the average capital valuation was less than 650 pesos, a great number of accounts were in arrears for a number of years. An indication of this condition is the notification form in use in 1945 which had spaces for the arrears beginning with the year 1935. In addition to the regular land tax, there are collected at the same time a surcharge of 10 percent of the amount of the tax which is earmarked for the State road fund, another 10 percent which goes into the general State treasury, and 5 percent of the amount of the tax which goes to the Federal treasury.

On the basis of the records in the tax office, there are 475 parcels of rural land in Quiroga and its ranchos which are owned by 291 persons, and which are valued at 199,980 pesos. Undoubtedly these figures do not cover all of the lands and landowners in the area, but the amount of omitted land is quite small. The *ejidal* parcels and their owners have not been included in the above figures, although the valuation of the cultivated *ejidal* lands is included in the valuation sum. There are actually a greater number of owners on record since we have considered each account to represent but one owner, although there were 4 groups of heirs, 5 groups of associates, 2 listings for minor sons, 4 simple partnerships, and 21 groups of brothers and sisters. The largest parcel of land was in La Tirímicua, valued at 14,300 pesos, and owned by a man and his wife. There were 10 other persons who owned lands valued at more than 4,000 pesos, and a total of 43 persons owned lands valued at more than 1,500 pesos. More than 50 percent of the rural property in Quiroga (102,010 pesos) is owned by 36 individuals. The chief landowners are Quiroga merchants, the heads of family in the mestizo ranchos (Sanambo, Icuácato, Caríngaro, and Atzimbo), and several absentee landlords (chiefly residents of Morelia and Pátzcuaro). If we accept our 1945 figures of 797 households, 931 families, and a population of 4,159 for Quiroga and its ranchos,

the percentages and averages are: About 36 percent of the households and 31 percent of the families own lands, and the total rural valuation of the Quiroga area averages 48 pesos per person. A study of the taxrolls and the family names indicates that certain families (at least individuals having the same surname) own lands out of proportion to their position within the total population. In the following tabulation the first column has the family names in the order of population represented, and the second column has the family names (followed by the number of individual landholders) in the order of the value of lands owned.

Population	Valuation
1. Barriga.	1. Ponce (16) \$16,750.
2. Herrera.	2. Barriga (21) \$15,030.
3. González.	3. Torres (9) \$11,910.
4. Fuentes.	4. Fuentes (12) \$11,240.
5. Chávez.	5. Herrera (16) \$8,810.
6. García.	6. Rodríguez (6) \$8,000.
7. Calderón.	7. Chagolla (12) \$7,610.
8. Rodríguez.	8. Díaz (19) \$7,500.
9. Campuzano.	9. Villaseñor (2) \$7,240.
10. Coria.	10. Gutiérrez (5) \$6,800.
11. López.	11. Milián (4) \$6,370.
12. Medina.	12. Calderón (12) \$6,300.
13. Peña.	13. Villaneuva (1) \$5,990.
14. Valdovinos.	14. Paramo (1) \$5,360.
15. Ortiz.	15. Medina (6) \$5,320.
16. Hernández.	16. Villalobos (4) \$4,830.
17. Estrada.	17. Arias (5) \$4,670.
18. Torres.	18. Chávez (7) \$4,340.
19. Guzmán.	19. Sierra (3) \$4,240.
20. Ponce.	20. Ruiz (9) \$4,190.

It will be noted that the family names associated with the old Hacienda Itziparamuco and its successor haciendas and ranchos (Ponce, Barriga, Herrera, Díaz, Milián, Chávez, Ruiz, and Sierra) own lands out of proportion to the population they represent, while the Indian families (Peña, Valdovinos, López, Estrada, Guzmán, and Chagolla) own comparatively little land. Some of the figures are slightly misleading since in some cases a man's property will be listed separately from that of his wife (who has a different surname), and also in some cases nearly all of the land in a given family-name group actually will belong to but one or two individuals (e. g., one Rodríguez owns \$6,000 of the Rodríguez total, and one Fuentes owns \$8,300 of the Fuentes total). Three-fourths

of the rural property is owned by 170 individuals bearing 20 different family names. The property of the Comunidad de Quiroga is valued at \$9,090 (this does not include private property of the members of the *comunidad*) which can be compared with the 1945 valuation of \$100,000 for the lands of the Comunidad Indígena de Santa Fe, and \$32,790 for the lands of the San Andrés community.

Under the present laws even the largest land-owners in the Quiroga area are considered to be small property holders, and are protected by the changes (1940, 1943, 1945, 1947) in the Federal constitution (the famous *Artículo 27*) and in the agrarian code. The lands subject to seizure must be within 7 km. of the center of the agrarian community requesting lands. No land may be taken from an individual who does not own more than 100 hectares of *tierra de riego* or *jugo*, or its equivalent in other classes of land. One hundred hectares of *riego* are considered to be the equivalent of 200 hectares of *temporal*, or 400 hectares of *pasto*, or 800 hectares of *cerril*. La Tirímicua, the largest holding in the area, probably does not contain more than 260 hectares of land of all classes. The median-sized parcel is valued at between \$200 and \$300 and probably comprises second and third class *temporal* amounting to about 2.5 hectares. The absolute range in the size of rural holdings (other than house plots) is from 3/100 of a hectare (3 *áreas*) up to about 260 hectares.

The total area of rural property in the Quiroga area is highly problematic. In the absence of surveys and adequate statements in the tax returns we must rely on estimates. We had planned to make an instrumental survey (plane table, alidade, compass, and steel tape) of the area but public opinion quickly forced us to give up the plan. We did make a number of sketch maps based on some triangulations (made at the end of our first stay) and whenever possible we took notes on field areas based on casually paced distances and surreptitious use of a pocket compass. As stated previously, we estimated the area of Quiroga and its ranchos to be about 52 sq. km. or 5,200 hectares. Perhaps 27 percent of this area is occupied by the town proper of Quiroga, the buildings in the ranchos, public roads and barren unclaimed spaces, and bare rocky peaks and completely denuded

slopes. The remaining 73 percent comprises the rural properties. We have estimated about 53 percent of the total to consist of *pastal*, *monte*, and *cerril* (essentially nonarable lands included within the rural properties). At a mean value of \$20 per hectare this would amount to \$55,120. The remaining 20 percent is arable farm land, which probably is distributed: 2 percent of *riego* and *humedad* (104 hectares at a mean value of \$500) worth \$52,000, and 18 percent of *temporal* of all grades (936 hectares at a mean value of \$100) worth \$93,600. This would give a total value of \$200,720 for rural property, which is quite close to the figures obtained from the tax rolls (\$199,980). Our figure of 1,040 hectares of cultivated land compares well with the estimates we obtained from a number of the business men and farmers in the area. The consensus of their estimates was that there were about 1,100 hectares distributed as follows: In the vicinity of the Villa de Quiroga and extending southward to Patambicho and Zirandangacho, some 400 hectares of the best land in the area; in the general La Tirímicua area, about 300 hectares; in Icuácato and Sanambo, another 300 hectares; and in Atzimbo and Caríngaro about 100 hectares. Accepting the rounded estimate of 1,100 hectares of arable land, there would seem to be an average of about 27/100 of a hectare or 2/3 of an acre per person.

We did no more than scan the tax records on urban properties. Since these records commonly only gave the location of the plot (*suerte*, *finca*, *predio*, *solar*, *terreno suburbano*) by bounding street or streets, and practically never gave dimensions or areas, we could form no idea as to the range and average sizes involved. The most valuable plots were those in the center with the most costly buildings, and some others away from the center with water rights, numerous fruit trees, flour or *nixtamal* mills, tanneries, and tile factories. According to the 1940 census 357 persons owned urban property, and there were 570 households, which would indicate that about 2 out of every 5 households are living in rented houses. According to the same 1940 census 28 of the owners of urban property and 18 others in the town of Quiroga (a total of only 46 individuals) owned rural property. A check of the tax rolls revealed that approximately double this number actually owned rural property.

THE PEOPLE

Always, in the study of the cultural geography of an area, of greatest importance and interest are the people themselves. They can be studied, analyzed, and reported upon from many points of view. In this section we will consider the inhabitants of the Quiroga area demographically; that is, along statistical lines concerned primarily with the data commonly found in population censuses and in vital statistics.

POPULATION CENSUSES

Immediately after the conquest of the Pátzcuaro Basin and Michoacán, the Spaniards were concerned with making use of the conquered Indians and with converting them to Christianity. Groups of Indians, described in terms of village units and areas, were entrusted to conquerors and their relatives (*encomenderos*), to the representatives of the crown (*corregidores* and *alcaldes mayores*), and to the priests of the missionary orders. All conquered Indians, with a few exceptions, had to provide a certain amount of tribute or tax, in the form of work, food, precious metals, firewood, manufactures of fibers, wood, metal, stone, and terra cotta, etc. The Spanish Crown, through its Council of the Indies and audiencias and viceroys, made many regulations concerning such tribute. Periodically surveys were made of the tributary population in order to determine its capacity to pay. Such surveys constitute the first censuses for our area.

In 1522 when the Pátzcuaro region was conquered by Olid for Cortez, modern Quiroga was the little Tarascan village of Cocupa or Cocupao and several other neighboring small villages. This group of villages, together with all the other villages and towns of the lake basin, were considered to be parts or *barrios* of the capital city of Tzintzuntzan (also known as Michoacán). As late as 1581 the city of Michoacán (which by that time had moved its administrative center from Tzintzuntzan to the *barrio* known as Pátzcuaro) included 73 *barrios*, 15 within Pátzcuaro city and the remainder scattered over the basin and even outside at distances from 1 to 10 leagues. Each of the 58 outside *barrios* was termed a pueblo. None of the sixteenth-century censuses, grants to *encomenderos*, or lists of *barrios* or pueblos, published to date mentions Cocupao by name. We

know that the Quiroga area was within the lands held by Cortez 1522–28/29, and after that it was held in the name of the Crown and in part by the *encomendero* Juan Infante and members of the family of the last *cazonci*—but this is merely indicated by the context of limits of grants and of enumerated pueblos. Consequently, we obtained no specific information as to population from the various *visitas*, *encuestas*, *tasaciones de indios*, and *tributos de pueblos de indios*. There may exist such information in the archives—in the divisions of *Tierras*, *Indios*, *Mercedes*, *Congregaciones*, and the like, but our brief examinations of the archives in Mexico City did not turn up such material.

POPULATION 1742–1822

From the title or *título* of the ancient República de Indios del Pueblo de San Diego de Cocupa and accompanying documents, and from manuscripts pertaining to congregations in Michoacán, we know that Cocupao was formed or reformed by congregating several small villages in 1534 or earlier, and that there was a later congregation in 1603 which brought in the populations of several other villages. But we do not know the names of all the constituent villages, nor do we have population data. By implication, what is now Quiroga was a small unimportant village until the end of the colonial period and the early part of the 19th century. The earliest figures are provided by Villaseñor y Sánchez (1746–48) (cosmographer for New Spain, and a native of Michoacán) who gives the figures of 30 families of Spaniards, 60 families of mestizos and mulattoes, and 70 families of Indians, for the Pueblo of San Diego Cocupa in 1742. By elimination of other pueblos mentioned in the area (e. g., Tzintzuntzan, Santa Fe, Teremendo, Capula), Cocupa of 1742 embraced essentially the area of this report. (For discussions of the compass of the entities known as Cocupao and Quiroga, see the sections on Land Settlement, pp. 13–14, 23–25; Government, pp. 97–102; and Religion, pp. 200–201.) If we arbitrarily assign five individuals to the family, as is commonly done in converting family figures to total population in colonial Mexico, we obtain a population figure of 800 for 1742. Various surveys and censuses were taken in the period 1766–86 to provide basic data for the administrative reforms that culminated in the establish-

ment of intendencies in 1786-87. Among the resultant Relaciones Geográficas, censuses, etc., we have not located anything pertaining to Cocupao-Quiroga. Probably there is something in the great 1792-94 (essentially 1793) census ordered by the viceroy Revilla Gigedo, but we did not examine the pertinent documents in the archives. It was from this census that Humboldt (1811) derived much of his information on New Spain. The first exact figures we find in the statistical analysis of Michoacán in 1822 by Martínez de Lejarza (1824), who gives San Diego Cocupao (with the same implied area as that covered by Villaseñor) a population of 2,752 (table 2). The considerable growth of Cocupao in population and in importance is supported by the facts that in 1742 it was smaller in population than Tzintzuntzan and was a dependency of that town, while in 1822 Cocupao had the largest population of any community in the northern half of the Pátzcuaro Basin and as early as 1820-23 was the seat of municipal government for the area now embraced in the *municipio* of Quiroga.

TABLE 2.—Population, 1742 and 1822

Pueblo	According to Villaseñor, 1742 (1746-48)		According to Martínez de Lejarza, 1822 (1824)
	Families	Individuals	Individuals
Ihuatzio and Cucuchucho.....	88	440	562
Tzintzuntzan.....	247	1,235	2,254
San Diego Cocupao.....	160	800	2,752
Santa Fe de la Laguna.....	120	600	1,151
San Jerónimo Purenchécuaro.....	35	175	489
San Andrés Ziróndaro.....	(1)	-----	519

¹ Not given.

POPULATION 1822-79

During the difficult and often anarchic period from the revolution against Spain until the *Paz Porfiriana* which began in the late 1870's, there were only a few estimates of population of the village, the municipality, and the parish. These estimates are often contradictory and often manifestly very erroneous. For whatever value they may possess, we present the estimates in table 3. It will be noted that the estimates of 1868 and 1879 are termed censuses. These figures were provided by the municipal authorities on the basis of information from the civil register and from the chiefs of blocks, dependent pueblos, and ranchos, and cannot be considered as formal censuses. This is true also for the so-called censuses of 1882 and 1889.

TABLE 3.—Population, 1822-79

Census	Quiroga proper	Ranchos	Muni- cipio	Parish
Martínez de Lejarza, 1822 (1824).....	1 2,752	-----	4,911	2,752
García Cubas, ca. 1860 (1888-91).....	1 6,018	-----	-----	-----
Coromina, 1861 (1886-1923).....	-----	-----	12,000	-----
Romero, 1853-62 (1860-63).....	-----	-----	-----	8,000
Census of May 1, 1868 (Memorias 1869).....	-----	-----	8,655	-----
Census of 1879.....	3,640	-----	12,173	-----

¹ Including ranchos.

² On May 1-8, 1874, Tzintzuntzan and its dependencies were attached to the *municipio* of Quiroga and remained a part of Quiroga until Sept. 19-24, 1930.

POPULATION 1882-1945

In 1882 there was founded the Federal *Dirección General de Estadística* within the ministry of development (*Fomento*), and after that date there was available advice and supervision from Mexico City. This Federal census bureau, after various changes in name and departmental location, resumed the original title of *Dirección General de Estadística* in 1923, and has been a dependency of the *Secretaría de la Economía Nacional* since 1933. The first national census was taken in 1895, which was followed by others in 1900, 1910, 1921, 1930, and 1940. These various national censuses vary greatly in the subjects censused and the quality of the work. The 1895 census returns were published by states and constituent districts, therefore data on the municipalities are lacking. The returns of the 1910 census were published in abbreviated form in 1918-20. The census scheduled for 1920 was held in 1921, and the volume on Michoacán was not published until 1927. This census is suspected of having been tampered with politically and padded. The more recent censuses are great improvements over all earlier censuses. Preliminary to a number of population censuses there were made (1909, 1921, 1929, 1939, and earlier years) censuses of houses and inhabitants that provide some gross population figures. In table 4 are given figures from the census of 1882 to our census of 1945.

An inspection of the figures from 1822 to date reveals several presumptive facts. The gain from 1822 to 1861 is not large, but it is reasonable considering the poor health conditions and the civil wars that obtained during that period. The great decline from 1861 to 1868 probably represents the difference between a rounded estimate for 1861 and a more exact count in 1868, and the losses resultant from the civil wars and the French Intervention of the 1860's. Most of the gain regis-

TABLE 4.—*Population, 1882-1945*

Year of census	Source of data	Municipality of Quiroga		Quiroga proper	6 dependent ranchos of Quiroga	Quiroga proper and ranchos (area of study)	Pueblo Santa Fe de la Laguna and dependencies	Pueblo San Jerónimo Purenchécuaro	Pueblo San Andrés Ziróndaro	Tzintzuntzan and its dependencies as of date of census
		As of date of census	As of 1945							
1882 ¹	Memorias	12,483	9,497	3,640	1,119	4,759	1,974	1,263	1,501	2,986
1889 ¹	do	13,603	10,581	4,033	1,477	5,510	2,133	1,357	1,601	3,022
1895 ¹	Census	12,486								
1900 ¹	do	12,357	9,205	3,404	1,029	4,433	1,721	1,404	1,647	3,152
1910 ¹	do ²	12,091		3,173						
1921 ¹	do	9,102	6,414	1,832	784	2,616	1,770	1,255	773	2,688
1930 ¹	do	10,879	7,925	2,657	917	3,574	1,960	1,209	1,182	2,954
1939	Edificios	9,299	9,299	3,212						
1940	Census	8,672	8,672	3,009	890	3,899	2,067	1,527	1,179	5,429
1945	Brand			3,161	998	4,159				

¹ Tzintzuntzan was a part of the municipality of Quiroga.² The remainder of the 1910 data are available, but my library is not at hand and this census is lacking in the University of Michigan library.

tered between 1868 and 1879 can be attributed to the addition of the population of Tzintzuntzan and its dependencies. The changes registered from 1879 to 1882 to 1889 in the municipality and in the town of Quiroga indicate a rather slow but consistent gain in the municipality, although the lack of change from 1879 to 1882 in the town of Quiroga is suspicious. There was a slow decline in the municipality, and a faster decline in Quiroga and its ranchos between 1889 and 1910. What could have occasioned this is uncertain, although the coming of railroads into the region during this period undoubtedly contributed to the reduction of the importance of Quiroga as a transportation and trade center. Apparently the high-water marks in the population and importance of Quiroga and its municipality were reached between 1852 and 1862 (when Quiroga became a *villa*, and then capital of a district), and again between 1887 and 1907 (when there was the greatest agricultural, industrial, and construction activity in the history of Quiroga). Between 1910 and 1921 Quiroga participated in the great regression produced by the revolution. Low-water actually was reached between 1914 and 1918, when portions of the town were sacked and burned, and some suburbs were abandoned. There was a general movement away from the ranchos and from Quiroga itself to larger centers of population which were not at the mercy of the bandit and revolutionary groups that preyed on so much of Michoacán and Mexico at this period. Between 1920 and 1930 there was some natural growth, but much of the growth is locally attributed to the return of natives from the United States and other parts of Mexico. There is indicated a slight increase in Quiroga, and in the

area of the present municipality, from 1930 to the present, although the ranchos have gained proportionately more. The population figures derived from the building census of 1939 can be disregarded since that census was not primarily concerned with population. The very small gain between 1930 and 1940, and even smaller rate of gain indicated between 1940 and 1945, for the town of Quiroga is the most striking phenomenon in the recent population history of Quiroga.

According to official Mexican statistics, the increase of population for all Mexico between 1930 and 1940 was 18.7 percent, and for the State of Michoacán it was 12.7 percent. During this period, for the area covered by the present municipality of Quiroga the increase was only 9.4 percent, and for Quiroga town and its ranchos the increase was a trifle less than 9.1 percent. Such a small rate of increase, despite the improvement of business due to highway improvement in this period, is difficult to explain. Part of the explanation rests in the birth and mortality rates which are discussed later. However, probably the resources of the natural environment in the area are so strictly circumscribed that growth (natural increase or total growth) never will be considerable. Undoubtedly the insufficiency of water for irrigation and for domestic consumption is the single greatest limiting factor. A comparison of densities further indicates that Quiroga probably will not grow greatly in the future. The 1940 census gives the present municipality of Quiroga a density of 105.76 persons per square kilometer. Mathematically this density would make the area of the municipality about 82 sq. km., although the 1940 census credits Quiroga with 120 sq. km., and the *Secretaría de Hacienda* (in its 1940 monograph on

Michoacán)^{1b} makes the area 100 sq. km. Accepting the largest estimate of 120 (which we believe is somewhat too large), we get a density of 72.2 persons to the square kilometer. This can be compared with the figure of 19.4 for the State of Michoacán, and 54.9 for the tiny State of Tlaxcala which is the most densely populated state in Mexico. At the most, the municipality of Quiroga contains less than 3½ acres of land per individual, and this includes mountain, lava flow, and eroded barren slopes, as well as some arable land. It will be noted that during the past nearly 130 years the population of the area covered by the present municipality of Quiroga has oscillated between about 5,000 and 10,000 or 12,000; that of Quiroga and its ranchos between about 2,700 and 5,500; and that of Quiroga town between about 2,000 and 4,000. Unless the water supply is increased materially, probably the above-mentioned entities will never greatly exceed the previously attained upper limits. Excess population has been, and will continue to be, siphoned off to the great labor markets of the large Mexican cities, northern Mexico, and the United States. For many years now Michoacán has been the leading Mexican entity in the provision of manual laborers or *braceros* for the United States, and apparently Quiroga has provided more than her share. This matter is considered elsewhere.

POPULATION BY SEX

Mexico is a land with a long-established population, and as one consequence there is a slight superiority of females over males—for both the Republic of Mexico and the State of Michoacán, the ratio is about 49 males to 51 females. Such a condition has obtained in the Quiroga region for a long time, as is shown by table 5.

TABLE 5.—*Distribution of population by sex*

Year	Municipio de Quiroga		Villa de Quiroga		Ranchos		Villa and ranchos	
	Male	Female	Male	Female	Male	Female	Male	Female
1822							1,409	¹ 1,422
1868	4,210	4,445						
1889			1,962	2,071	707	770	2,669	2,841
1900	6,149	6,208	1,621	1,783	525	504	2,146	2,287
1910	5,941	6,150						
1921	4,511	4,591	849	983	409	375	1,258	1,358
1930	5,334	5,545						
1940	4,323	4,349	1,471	1,538	477	413	1,948	1,951
1945			1,484	1,677	512	486	1,996	2,163

¹ Does not agree with totals.

^{1b} See: Mexico. Secretaría de Hacienda y Crédito Público, 1940.

In 1930, while Tzintzuntzan was still included in the municipality, females constituted 50.97 percent of the population, or almost exactly the state and national percentage. In 1940 the figure had changed to 50.14. This lowering of the proportion of females to males may represent only a higher concentration in the Tzintzuntzan area that had been withdrawn since the 1930 census. Within the town of Quiroga proper, females comprised 51.11 percent of the population in 1940, but this rose to 53.04 percent in 1945. Much of this change may be attributed to the *bracero* program which attracted so many men from Michoacán in the 1940's, and also the much higher wages that labor commanded in northern Mexico and the large urban centers. An anomaly is the rather consistent predominance of males over females in the ranchos. When the total area of Quiroga town and its ranchos is considered the percentage of females is found to be 50.03 in 1940 and 52.00 in 1945. The only explanation that occurs to us for the local preponderance of males in the ranchos is that the population there is almost entirely agricultural, and since most of the families own farm lands (excepting in the two minor ranchos of Zirandangacho and La Tirimicua) there is plenty of work for all.

POPULATION BY AGE

In our census we did not ask for the specific age of individuals. The information is available in the general census of 1940, and the general trends probably have not changed much since that census. We did list individuals as adults or children; all married individuals, boys more than 20 years of age, and girls more than 17 years of age were considered to be adults, and all others were listed as children. We give the information derived from the censuses of 1940 and 1945, but the data are not very reliable. In checking the civil register and the ages given in the 1940 census we have discovered a number of discrepancies. In evaluating the data on ages a number of points must be kept in mind. In the first place, most of the individuals are not time- or calendar-conscious, and often make honest mistakes in remembering their age. The birthday or the saint's day is the important thing to celebrate, and which year it represents is not considered important. Individuals between about 14 and 29 years of age are usually much more accurate in their memory or

knowledge than are older and younger persons. However, there is a common tendency to add 1 year to the real age. This is because a person who has, for example, passed his twentieth birthday is in his twenty-first year and will think of himself as being 21 years of age. Also, parents are very apt to say that a baby that is between 9 and 12 months of age is 1 year old. Granting the ignorance as to real age that obtains, it is quite natural that the ages that terminate in "0" or "5" should be represented unnaturally in the statistics. It will be observed that with the exception of the age of 15 years, all ages terminating in "0" or "5" are better represented than the age on either side. Furthermore, commencing with the age of 35 the "0" and "5" years are superior to the sum of the adjacent years (excepting age 55); and obviously the ages of 50, 60, and 70 are the merest approximations. It will be noted that age 41 is represented by only 13 persons, which number is not undercut until age 57. This is explained in Mexico by an event, during the Díaz regime, which involved 41 homosexuals, and ever since the number 41 has been taboo—especially for men. Curiously enough, ages ending in 7 are usually the most poorly represented in any group of 10; e. g., 31–40, 51–60, 61–70, and 71–80; and where 7 is not the lowest it is 1 as from 11–20, 21–30, and the 41 ties with 47 in the 41–50 group. Of course, it is expectable that the numbers before and after 0 and 5 (9, 1, 4, and 6) would be poorly represented, but the actual situation does not fully conform with that expectancy. From the above it is evident that the following tabulation of distribution of population by age in Quiroga and its ranchos in the 1940 census is merely a general indication of the true condition. In this connection we might mention that on numerous occasions, while working on records in the civil registry, we heard the clerk decide on some arbitrary age for an individual who was uncertain; e. g., some relative who had come in to make a declaration in connection with a birth, marriage, or death.

In 1940 the population of Quiroga and its ranchos had modal ages of 3 and 8 years (133 persons each), a median age of 18 years, a mean or average age of 22.8 years, and a range from newly born to 98 years. Of this population 42.98 percent were under 15 years of age. The 51 persons over 70 years would make this almost exactly 43 percent. This can be compared with a percentage of

Age distribution, March 6, 1940¹

Age (years):	Persons	Age (years)—Con.	Persons
Less than 1.....	116	45.....	58
1.....	112	46.....	31
2.....	120	47.....	13
3.....	133	48.....	35
4.....	114	49.....	15
5.....	125	50.....	72
6.....	115	51.....	23
7.....	122	52.....	32
8.....	133	53.....	13
9.....	89	54.....	18
10.....	116	55.....	36
11.....	58	56.....	23
12.....	119	57.....	6
13.....	91	58.....	11
14.....	113	59.....	10
15.....	79	60.....	57
16.....	87	61.....	9
17.....	65	62.....	4
18.....	105	63.....	7
19.....	66	64.....	5
20.....	83	65.....	20
21.....	36	66.....	10
22.....	65	67.....	3
23.....	56	68.....	6
24.....	57	69.....	5
25.....	66	70.....	20
26.....	51	71.....	3
27.....	54	72.....	4
28.....	51	73.....	3
29.....	42	74.....	2
30.....	70	75.....	8
31.....	34	76.....	1
32.....	44	77.....	0
33.....	38	78.....	2
34.....	35	79.....	2
35.....	85	80.....	9
36.....	45	81.....	4
37.....	29	84.....	1
38.....	49	85.....	4
39.....	39	86.....	1
40.....	88	89.....	1
41.....	13	90.....	3
42.....	37	91.....	2
43.....	29	98.....	1
44.....	15		

¹We have no record of age for 17 individuals.

39.3 in 1930 for persons under 15 years of age in all of Mexico. Either figure represents entirely too large a group of dependents. Even allowing for the absent *braceros* and others who remit money to Quiroga, the proportion of those normally not gainfully or usefully employed is much too large. In part this situation explains the low standard of living that obtains in Quiroga and elsewhere in Mexico.

TABLE 6.—*Distribution of unmarried girls under 18 and unmarried boys under 21*

Year	Total population	Girls		Boys		Combined percentages
		Number	Percentage of total population	Number	Percentage of total population	
1940.....	3,899	908	23.28	1,097	28.13	51.41
1945.....	4,159	1,000	24.04	1,014	24.38	48.42

Unmarried girls under 18 and unmarried boys under 21 years of age in 1940 and according to our census of 1945 were distributed as shown in table 6. The proportions for the females seem to be in accord, but the reduction in absolute numbers as well as percentage of unmarried boys from 1940 to 1945 probably represents a weakness in our census of 1945. We have reason to believe that often boys between 16 and 20 years of age would be included among adults merely because they were gainfully employed. In any case, an unmarried minor population that constitutes about half of the total is a significant fact.

AGE AND SEX

The distribution of sexes by age, according to the census of 1940, in general resembles the norms determined for Mexico by the 1930 census but there are some important deviations. In the first place, the 1940 census gives Quiroga almost as many males as females (only 3 more females). Because of this virtual equivalence, various of the age-sex concentrations do not show up so clearly as they might if there were a more decided predominance of the females. In 1930 males predominated at all ages from newly born babies through the 10- to 14-years group, and in the groups from 55 to 59, 65 to 69, and 75 to 79; and females predominated in all age groups from 15 to 19 through 50 to 54, and also 60 to 64, 70 to 74, and from 80 upward. In Quiroga the males predominate up to 15, but the superiority of females from 15 to 55 is broken in the 25 to 29 and 30 to 34 groups, and there are some other minor differences, as can be seen in table 7.

Three facts stand out in the statistics given above. Quiroga has a young population, with 53.52 percent of the people (55.18 percent of the males and 51.77 percent of the females) of an age under 20 years. Males predominate in the ages

TABLE 7.—*Distribution of sex by age, 1940*

Age (years)	Total	Male	Female
Under 1.....	116	53	63
1.....	112	57	55
2.....	120	69	51
3.....	133	76	57
4.....	114	53	61
0-4.....	595	308	287
5-9.....	584	302	282
10-14.....	497	261	236
15-19.....	402	198	204
20-24.....	297	144	153
25-29.....	264	135	129
30-34.....	221	115	106
35-39.....	247	109	138
40-44.....	182	91	91
45-49.....	152	64	88
50-54.....	158	70	88
55-59.....	86	44	42
60-64.....	82	35	47
65-69.....	44	22	22
70-74.....	32	19	13
75-79.....	13	8	5
80-84.....	14	6	8
85-89.....	6	4	2
90-94.....	5	2	3
95-99.....	1	0	1
Age uncertain.....	17	11	6

0-19 (excess of 60 over females), and also from 0-34 (excess of 66), but the greatest concentration is in the range 0-14 (excess of 66); while the females predominate in the range 20-99 (excess of 68), and especially 35-69 (excess of 81). Apparently if a child can get through the critical years between birth and 9 years it has an excellent chance for survival, although women (once they have finished bearing children) have better chances in middle and old age than do men.

VITAL STATISTICS

PARISH AND CIVIL REGISTERS

At present the vital statistics in Mexico are obtained from the decennial censuses, special censuses, and from the civil register. However, the oldest source of such data is to be found in the parochial books or registers which covered baptisms (the equivalent of a registry of births among a wholly Roman Catholic population), marriages, deaths, and other subjects such as confirmations and Christian census or visitation of the parish (*status animarum*). Presumably such registers were kept from early colonial times onward to the present, although the practice, forms of inscription, and archival preservation, were not fully regulated until the Council of Trent (1545-63), the Milanese Councils (1565-82), the Council of Cambrai (1586) and the adoption of the Roman Ritual (1614). A Franciscan convent and a missionary church were established in Cocupao-

Quiroga early in the sixteenth century, and this parish was secularized 1786–87. However, no registers were found for dates earlier than 1781. We can only guess that the earlier registers may be with the archives of the almost extinct Franciscan province of Michoacán (in Acámbaro or Celaya) or in the sequestered archives which are scattered from Morelia to Mexico City and fragments of which are to be found in foreign libraries.

The present archives of the parish of Quiroga contain *Libros de Bautismos* (Baptismal inscriptions) Nos. 1 to 17 (excepting books 7, from 1865 to 1871, and 9 to 11, from 1884 to 1889) which cover the period 1781 to date; *Libros de Matrimonios* or *Casamientos* (Marriage inscriptions), from 1782 to date; *Libros de Entierros* (Burial inscriptions), from 1806 to date; and other types of record. Possibly copies of the missing material may be found in the episcopal archives in Morelia, since canon law requires that annually copies of all parish registers (excepting the *status animarum*) be sent to the secretariat of the bishopric. As mentioned in a later section on Names and Ethnic Origins, beginning in 1781 the baptisms of the various castes were kept in three different books. We did not have the time to scan the different books and determine when the segregation of castes ceased actually in the Quiroga parish books, but it was some time within the period 1831–87. In the *Libros de Entierros de Muertos* were given the date of death, name of the deceased, cause of death, age, name of some near relative, and where buried—at least from 1856 onward.

In the period 1857–59 various laws were passed by the liberal Mexican Congress in an attempt to break the hold of the Roman Catholic Church on the social-political-economic life of the people. Among these laws were some which established a municipal *registro civil* or civil register, removed the cemeteries from ecclesiastic control, and legalized a civil form of marriage. Between 1871 and 1874 additions were made to the law of civil registry, but since that period no fundamental changes have been made. The *registro del estado civil* concerns births, marriages, and deaths and burials. The municipal president is the honorary judge of the civil register and is supposed to sign the various books. The actual work of inscription is entrusted to a scribe or secretary, who, in Quiroga, has been Don Rafael Huape since January 6, 1936. Because of clerical opposition, the

cost and time and difficulty involved in going to the office of registry, and the lack of personnel and supplies, the records in the registry books are never complete. This is especially true for the period 1859 to 1929. Mexican statisticians calculate (on the basis of comparisons of civil register entries with those in the parish registers) that between 1859 and 1895 less than one-third of the births were entered; the percentage rose to about 70 for the period 1895 to 1900; was 81.4 percent from 1921 to 1930; and is now more than 95 percent. The requirement, since 1929, of a certificate from the civil register before a child may be enrolled in school or baptized in church has brought about almost complete registry of births. The chief exceptions are stillbirths and babies who die within a few days after birth. Since no one may be buried in the cemetery without a certificate from the civil register the record of deaths has consistently been the most complete, excepting always the stillbirths and the very young. The matrimonial data are the most incomplete since there can be three forms of marriage—common-law or *unión libre* with no ceremony of any kind, just the religious marriage, which is officially considered no better than a common-law marriage, and the civil marriage which is registered.

The tendency has been to have only the religious marriage or no ceremony at all, but in recent years a majority of the marriages combine the civil and the religious. Beginning in the period 1882–92 national vital statistics began to be compiled on the basis of data from the civil register. In the State of Michoacán such records began about 1880.

The civil register office or *juzgado del estado civil* in Quiroga is located on the upper floor of the municipal building where it occupies a dingy unlighted room in which is also located the office of the State telephone network. In this room are kept all the current books as well as all that exists of the civil register archives. Apparently a civil register was opened in Quiroga in 1860. At that time the register area covered essentially what is the present municipality of Quiroga. In 1871 Tzintzuntzan and its dependencies were added, and they continued to report to the Quiroga office until September of 1930. When we checked the archives we found the following records: *Libros de actas de nacimientos* 1862, 1863, 1868, 1873–91, 1893, 1895–97, 1899–1905, 1907–15, 1919 to date.

By law duplicate copies must be sent to the State capital, and in Morelia we found copies for the missing years 1861, 1867, 1892, 1894, 1898, 1906, and 1916. There is a complete lack of record for 1860, 1864-66, 1869-72, and 1917 and 1918. There were *Libros de actas de defunciones* for 1860-64, 1867, and 1868, 1873-80, 1882-1917, and 1920 to date. The missing years were not available in the State archives. There were *Libros de actas de matrimonios* for 1861-63, 1867, and 1868, 1873-87, 1889 and 1890, 1893-97, 1899-1905, 1907-13, 1916, 1923, and 1926 to date. The State archives supplied 1888, 1891 and 1892, 1898, 1901, 1906, 1914 and 1915, 1921 and 1922, and 1924 and 1925. It will be noted that the chief lacks occur for the periods 1860-72 (which was a period of anarchy caused by the Wars of Reform, the French Intervention, and the chaotic conditions before Díaz came into power) and 1914-25 (the main era of the revolution, of banditry, and Cristero activity). It is known that the bandit Inez Chávez García burned some of the books in 1918, and that the Cristeros burned others in 1928. Many of the books we handled, with dates from 1860 to 1928, were smoked or charred in varying degrees. Since 1937 printed form books have been issued and authorized by the State government. Prior to that date the books varied considerably in form, and they were authorized by the local municipal president and the Federal revenue agent. A set form was used for *defunciones* or deaths in 1920 and 1921, and the present forms for all three sets of books came into use in 1944. Fingerprints were first used in 1937. All entries are made in longhand.

BIRTHS

Births are entered with running numbers for all births registered in the municipality. The child is brought to the office as soon as possible after birth by some relatives (usually the father and a grandmother or aunt) and is fingerprinted. In the record or *acta* the following data are entered: father's name, birthplace, occupation, and age; mother's name, birthplace, and age; sex of child, date born, name, and domicile. Also the nature of the married state; e. g., common-law marriage or civil marriage, is entered. We copied all entries for Quiroga town and its ranchos for the years 1940 to 1945 inclusive, and also 1873, 1863, and 1862. The earlier records differed from the later

ones chiefly in the greater proportion of those parents or witnesses who could not sign their names, and in the indication (for a time) if the parents were Indians or non-Indians. A number of sources for error are apt to occur in the books. Late registration will cause a number of December births to be recorded in the book for the following year. Between the parents and the secretary a number of variations in the spelling of proper names are produced. Some entries are highly illegible, and occasionally one or another statement (such as age, domicile, or occupation) will be omitted. There are a few births in transient families, and occasionally births are registered from communities on the borderlands of the registration area, e. g., Cuenembo, Tzintzamacato, and El Tigre. We were told that a number of stillbirths, prematures or abortions, and illegitimates are recorded neither under births nor deaths. For comparative purposes we show the births in the municipality of Quiroga when its area and/or population were greater than at present. It will be observed (table 8) that the proportion of total registry varied considerably.

TABLE 8.—*Birth records in Quiroga*

Year	Total municipal	Quiroga and ranchos	Male	Female	Sets of twins	Father unknown
Earlier births:						
1861.....	265	90	48	42	-----	-----
1862.....	150	45	28	17	-----	-----
1863.....	104	17	10	7	-----	-----
1873.....	306	160	79	81	-----	-----
1880.....	373	-----	193	180	-----	-----
1881.....	357	-----	179	178	-----	-----
1882.....	412	-----	210	202	-----	-----
Recent births:						
1940.....	265	185	92	93	2	-----
1941.....	268	171	82	89	2	1
1942.....	258	185	105	80	-----	1
1943.....	-----	172	106	66	4	-----
1944.....	286	197	109	88	3	1
1945.....	308	229	107	122	3	1
Total.....	-----	1,139	601	538	-----	-----

Since we did not analyze the birth records for 1939 it was not possible for us to check the births in the 12 months prior to the census of March 6, 1940, and compare this number with the number of children listed as under 1 year of age in the census. Nor did we have the time to compare the returns in the civil registry with those in the parish register. We can be certain that the births and birth rate in the Quiroga area are somewhat higher than indicated. In 1940 Quiroga had a birth rate of 47.44 births per each thousand of population, which compares with

42.3 for all of Mexico in 1940 or the rates of 44.0 for Mexico and 46.3 for the State of Michoacán averaged over the period 1936–40. The 1945 rate in Quiroga was an exceedingly high 55.06 per thousand of total population; and the average rate for 1940–45 was 47.1. Although more females than males have been born in various years, the superiority in number of males over females is so marked in 2 or 3 years out of every 5 that there are always more male than female children born in any span of 3 years or longer. For the period 1940 to 1945 the ratio of males was 52.7 to 47.3 for females. What determines the cyclic or eccentric predominance of one or the other sex we do not know.

There appears to be a certain rhythm or cycle to births within the year. During the 6 years 1940 to 1945, there were 116 births in June, and June was in the top 4 birth months in 3 of the 6 years; there were 115 births in January, and January was one of the top 4 months in 5 of the 6 years; there were 113 births in May, and May was in the top 4 months in 3 of the years; and in October there were 112 births, and October was in the top 4 months in 3 of the years. There were 76 births in February, and February was one of the 4 low birth months in 5 of the years; March had 79 births, and was in the low group in 3 years; April had 80 births, and was low in 5 years; and there were 84 births in September, which was in the low group in 2 years. From high to low number of births the sequence is June, January, May, October, July, August, November, December, September, April, March, and February. Although the addition of a few more years of record might alter some of the relative positions, it is clear that January, May, June, and October are consistently the leading birth months, and that February, March, and April are the months of fewest births. From these data we derive the conclusions that there are the most conceptions in August, September, and April, and the fewest in May, June, and July. It is possible that these critical periods may have some connection with the various seasons of planting, cultivating, and harvesting of the chief crops, but the relationships are not apparent to us. It is possible that the May–June–July period of transition from extreme heat and dryness to the wet season with accompanying physiologic reactions (including increase of pulmonary dis-

eases and various fevers such as typhoid) may have some bearing on the small number of conceptions. Considered by sexes, the distribution is somewhat different. There were the most male births in January (60), May (59), and June (59), and the fewest in March (41), November (42), and December (42); while there were the most female births in October (61), June (57), and January (55), and the fewest in February (28), April (29), and September (35). However, a longer series should be studied before any conclusions can be made positively.

MARRIAGES

As has been mentioned, civil marriage is not absolutely mandatory, therefore the records in the civil registry are far from complete. For the years that we examined, the number of civil marriages in Quiroga and its ranchos were: 1945–60, 1944–59, 1943–42, 1942–34, 1941–44, 1940–47, and 1939–62. We would guess that at least three-fourths of the unions are now ratified with a civil marriage, and nearly all of these civil marriages are succeeded by a religious marriage. We made no analysis of the civil marriage records excepting as regards ages, and for this we considered only the marriages in 1945 and 1944. In six of the 119 marriages the woman was the older, in six cases the ages were the same, and in six cases the age of the woman was not given. The greatest discrepancies in age were in marriages between a man of 55 and girl of 19 (36 years), a man of 56 and a woman of 32 (24 years), and a man of 39 and a girl of 18 (21 years). The median difference in age is 4 years, the modal difference is 2 years, and the average of the differences is 5 years. The males ranged in age from 16 (which is the lowest permissible age for a male) to 56, with the median at 22, the mode at 21, and the average of the ages 24.8 years. The females ranged in age from 15 to 48. The most popular ages for marriage were 18 (the median and mode with 21 instances), 17 (17 cases), 15 (15 cases), and 16 and 19 (with 11 cases each). Probably many of the girls listed with an age of 15 actually were 14, which is the lowest legal age for marriage of females. This can be compared with ages of 12, 13, and 14 in a number of our States, such as Michigan, Mississippi, New Hampshire, and New York. The favored months for marriages (at least for civil marriages) are April, November, January, and February,

which had 155 or 44.5 percent of the 348 civil marriages in the period 1939-45. The least favored months were September, June, August, and July, which had 83 marriages or 23.8 percent of the total. It is evident that the month of marriage has very little to do with the month of heaviest conception.

CIVIL STATUS

Although *estado civil* or civil status is not recorded as such in the civil register, it can be derived from the records. Actually, the census gives us the best picture of the situation. Since we did not inquire into this matter, the following discussion is based on the 1940 and other censuses. The various civil statuses as listed in table 9 are: Child (under 16 for a male and under 14 for a female), single (unmarried males 16 or older, and unmarried females 14 or older), widowed (widower and widow), divorced, and married (common law, religious, civil, and civil-religious).

TABLE 9.—*Civil status in 1940*

Status	Males		Females		Total
	Age (years)	Number	Age (years)	Number	
Child.....	0-15	912	0-13	759	1,671
Single.....	16-75	316	14-91	352	668
Widowed.....	23-91	52	18-98	142	196
Divorced.....				4	4
Married:					
Common law.....		14		28	42
Civil.....		17		19	36
Religious.....	17-80	152	22-85	152	304
Civil-religious.....	18-85	481	16-81	484	965
No data.....		4		11	15
Total.....		1,948		1,951	3,899

Single males or bachelors have a median age of 20 years; the modal age is 18; and five-sixths of the bachelors are between the ages of 16 and 25. Single females or maids have a median age of 18 years; the modal age is 14; and 72 percent are between the ages of 14 and 23. Widowers have a median age of 58 and widows have a median age of 54. There are more widows than widowers, and both absolutely and proportionately the widows are both younger and older than the widowers. In general men are more apt to remarry after the death of a spouse than are women. Many of the men listed as married have been widowed one or more times, but this is rarely true for the women. In the ranchos, and especially in Sanambo, the widows and widowers are

more apt to remarry than in the town of Quiroga, probably because of the larger families and the farms that must be attended. Women past their thirties tend to live longer than men, which would explain the greater absolute and average age of the widows in the oldest 20 percent. There are no divorced men, probably because a greater onus attaches to a divorced female than male, and it is difficult for them to remarry. There are a total of 1,347 married individuals (664 men and 683 women), who constitute 655 couples, 9 men whose wives live elsewhere, and 28 women whose husbands live away from Quiroga. This accounts for a total of 692 marriages or families. (If we add the divorced and the widowed we obtain the number of 892 theoretical families.) However, half of the women whose husbands were not living with them at the time of the 1940 census were married in common law (*unión libre*), and probably they had been abandoned. In 1940 civil-religious marriages accounted for 71 percent of the total. It is noteworthy that while the mean age of men who had civil-religious marriages was 36, and that of their wives was 33 (actually about a difference of 2½ years rather than 3 years), the mean age of men who had religious marriages was about 45 and that of their wives about 41. This would indicate an increasing use of the civil marriage ceremony. From the detailed statistics it would appear that married women do not live so long as single, divorced, and widowed women. This is probably because of the great drain entailed by bearing and looking after children, preparing meals, and doing the laundry. There were no married males or females under 16 at the time of the census. Evidently the marriage of girls of 14 and 15 is comparatively rare, but we wonder what happened to the several girls of 14 and 15 who were married in Quiroga in the 12 months just preceding the census of March 6, 1940. Either they moved away or else they aged rapidly after marriage.

THE FAMILY

The family statistically, as derived from censuses, is nothing more than the individuals of a household. The tendency in Quiroga is patrilocal, so that quite often a household will contain, for example, a man, his wife and children, a younger brother with wife, a yet younger brother or sister, and possibly the man's father or mother.

From the 1940 census and from our census of 1945 it is possible to obtain a break-down into families based on individual marriages; e. g., the household mentioned above would represent three families. This is different from a true immediate family which comprises a married couple and all of their living children, whether they are married or not or whether the children live with their parents or elsewhere (table 10). In 1940 Quiroga and its ranchos averaged 4.47 persons per family, and the average in 1945 was virtually the same—4.46. Slight local differences are manifest in family size. In 1940 the averages were (by quarters or *cuarteles*): *Cuartel I*—4.46; *Cuartel II*—4.20; *Cuartel III*—4.30; *Cuartel IV*—4.59; and the ranchos—4.80. Within the six ranchos the averages ranged from 4.30 for Atzimbo, through 4.70 for Icuácató, 4.80 for Zirandangacho, 4.90 for Carín-garo, and 5.10 for Sanambo, to 5.50 for La Tirí-micua. In general the wealthiest and most urban quarters (II, III, and I) and the richest and closest large rancho (Atzimbo) have the smallest families; while the poorest quarter (IV) and the smaller or more remote and rural ranchos have the largest families. There seems to be a slight correlation between wealth and urban situation and a tendency toward smaller families. Our 1945 census returned approximately the same situation, the sequence of family averages being as follows: *Cuartel I*—4.23; *Cuartel II*—4.26; *Cuartel III*—4.47; *Cuartel IV*—4.52; and the ranchos—4.88 persons per family. In 1940, families ranged in size from 1 person to 11 persons, with a median of 4, a mode of 5, and a mean of 4.47. Nearly the same conditions obtained in 1945 excepting that the modal size was 2 and the mean was 4.46.

TABLE 10.—Households in Quiroga, 1940 and 1945¹

Year	Cuartel I			Cuartel II			Cuartel III		
	H	F	P	H	F	P	H	F	P
1940.....	140	157	701	163	200	857	144	186	794
1945.....	166	189	800	163	183	780	163	200	894

Year	Cuartel IV			Ranchos			Total	
	H	F	P	H	F	P	H	F
1940.....	123	143	657	² (185)	185	890	755	871
1945.....	137	152	687	168	207	998	797	931

¹ H represents the number of households or occupied houses or census units; F, the number of families; and P, the number of persons.

² Assumedly the same number of households as family groups.

Another picture of the family in Quiroga can be obtained from the 1940 census statistics which show, for every woman who had been married, age at time of first marriage, total number of children born alive, and number of children still alive at the time of the census. A total of 830 women had been married at some time in their lives. Of this number we had no data on 4; 28 had had no children but had been married less than 3 years; 59 had been married for more than 3 years but had had no children and consequently were considered barren or sterile; and the remaining 739 women had given birth to one or more live children. Subtracting the 4 with no data and the 28 married less than 3 years from the total number of married women, we obtain the number of 788 women married 3 years or longer for whom we possess data. The 59 barren women constitute an exceedingly small 7.3 percent of this number. In other words, only 7 out of every 100 married women do not bear children, for some reason. Considering the cases of early widowhood and the theoretical probability that at least half of the husbands of barren women are impotent, we can conclude that probably fewer than 3 percent of the women in the Quiroga area are sterile. This is in line with the traditional fertility of Indian and mestizo women in Latin America as a whole. The fertility of married women in the divisions of Quiroga is shown in table 11.

Apparently life in the ranchos tends to reduce the factors which cause sterility. We are assuming that in a Roman Catholic and unsophisticated community there is very little use of contraceptives. We have heard that there is some use of herbs which are supposed to thwart conception, but presumably (according to hearsay) their use is restricted to older women who have borne a number of children and to a few unmarried girls.

TABLE 11.—Fertility of married women in Quiroga

Division	Married women	Barren	Recently married	No data	Mothers
Cuartel I.....	150	14	8	0	128
Cuartel II.....	184	17	4	0	163
Cuartel III.....	183	12	9	2	160
Cuartel IV.....	136	15	2	0	119
Ranchos.....	177	1	5	2	169
Total.....	830	59	28	4	739

The age of women at the time of first marriage or union ranged from 12 to 50, with 18 years being both the median and the modal age. Approxi-

mately half of the women married between the ages of 15 and 18 inclusively, and about three-quarters (607) married at ages from 14 to 21. The cases of early marriage were 1 at 12, 5 at 13, 47 at 14, and 67 at 15 years. There were only 19 marriages at 35 or older. As has been pointed out in connection with the age of the population, most exact ages cannot be accepted at face value, but the figures given above certainly represent the trends that obtain in Quiroga.

The 739 mothers had a total of 3,824 children. This was an average of 5.17 children per mother. The range in number of children per mother was from 1 to 17, with 3 being the modal number, and the median falling exactly between 4 and 5 children per mother. The average per mother ranged from a low of 3.87 in the ranchos, through 5.01 in *cuartel* I, 5.15 in *cuartel* III, and 5.69 in *cuartel* II, to 6.36 in *cuartel* IV. It is interesting that the division with the fewest mothers had the highest average, and the division with the most mothers had the lowest average.

Mortality among the children born to Quiroga mothers was very high, amounting to 36.4 percent. This and the succeeding data are based on information from the town of Quiroga alone, since the census taker in the ranchos evidently made a mistake and submitted returns that would indicate that no children ever died in the ranchos, which is quite contrary to fact. This mortality is not quite that of children alone, since the data merely indicate offspring who died before the mother. There were 51 mothers who were 60 years or older, and it is expectable that some of their grown children would die. However, these 51 old mothers did not have enough mortality among their offspring to materially affect our percentages. We selected the age of 60 as a critical one for comment because the offspring of mothers of this age would be 45 years old or younger, and in Mexico (as of tables of 1930) if a child reaches the age of 2 he can expect to live to the age of 46, and if he is still alive at the age of 6 he can expect to live to the age of 53; at 10 the expectancy is to live to 54, and at 12 the expectancy is to live to 55 years of age. Of the mothers, 355 lost children, which is an average of 3.25 per mother. In other words, 62.28 percent of the mothers in Quiroga town lost one or more children. The total number of offspring who died was 1,155, and the range was from 1 to 15 deaths per mother. The modal

number of deaths was one, and the median was four deaths. The average of children's deaths per mother was lowest in *cuartel* I (2.5), and was highest in *cuartel* IV (3.84). There is a definite correlation between larger families and more deaths.

Utilizing all possible data in the 1940 census we were able to come to some tentative conclusions concerning lapse between marriage and the bearing of the first child, and concerning the duration of the bearing period. There were data on lapse for approximately half (410) of the women. Approximately 71 percent (291) bore their first child within the first year after marriage, and 90 percent had their first child within the first 3 years of marriage. A few individuals (19) had their first child after 6 years or longer of marriage—the extreme case was in the 17th year. The most common spacing of children is at approximately 2-year intervals, and next in frequency are 1- and 3-year intervals. The bearing age ranged from 15 to 52, but more than one-half of the children were borne by women 30 or younger, and three-fourths were borne by women under 36 years of age. Approximately 10 percent of the children were borne by women who were 40 or older. The highest bearing period seems to be from 18 to 35. Correlative material was derived from the 1945 list of births in Quiroga. Of the 226 couples who had children in that year, the range in age of the husbands was 19 to 62 with a median of 32, and the range in age of the wives was 16 to 45 with a median of 26. The women under 36 bore 90 percent of the babies born in 1945. An interesting study was afforded by the age differences in these 226 couples. Six of the couples were of the same age; in 12 couples the age of one or the other partner was unknown; in 18 couples the woman was older than the man; and in the remaining 190 cases the man was the older. The older men ranged from one to 37 years older than their spouses, with a median of 5 years and a mean of 6.3 years difference.

DEATHS

RECORDED DEATHS IN MUNICIPALITY OF QUIROGA

The *Actas de Defunción* or death records are among the most complete and informative of the records in the office of civil registry. Among the items of information given on the form in use at present are: Name, age, nationality, civil status,

TABLE 12.—*Recorded deaths in the municipality of Quiroga*

Year	Total deaths in municipality	Deaths in Quiroga and its ranchos	Comments
1860	167	125	First year of record.
1861	236	164	
1862	240	142	
1863	192	117	
1864	144	127	Record incomplete.
1865			No record.
1866			Do.
1867	307	146	
1868	188	125	
1869			No record until 1873.
1873	444	219	
1874	271	155	Tzintzuntzan records included until 1930.
1875	276	129	
1876	321	166	
1877	437	197	
1878	563	222	
1879	531	247	
1880	330	171	
1881	435		Figure from Memorias.
1882	320	136	
1883	523	239	
1884	389	203	
1885	496	(?)	We did not analyze the records 1885-96.
1886	397		
1887	411		
1888	502		
1889	461		
1890	355		
1891	570		
1892	473		
1893	328		
1894	291		
1895	306		
1896	324		
1897	250	123	
1898	372	193	
1899	560	192	
1900	233	(?)	We did not analyze records 1900-1903.
1901	268		
1902	290		
1903	389		
1904	373	145	
1905	380	147	
1906	507	154	
1907	528	174	
1908	430	168	
1909	361	148	
1910	596	221	
1911	477	(?)	Record incomplete. We did not analyze records 1911-36.
1912	388		
1913	302		
1914	422		
1915	600		
1916	480		
1917	424		
1918			Norecord.
1919			Do.
1920	88		Period of anarchy. Records apparently complete, but only superficially so. Low point in population of Quiroga.
1921	90		
1922	177		
1923	179		
1924	347		
1925	345		
1926	323		
1927	263		
1928	201		
1929	469		
1930	276		Tzintzuntzan removed from the municipality of Quiroga.
1931	229		
1932	274		
1933	309		
1934	184		
1935	181		
1936	226		
1937	199	113	Began analysis of modern conditions.
1938	186	85	
1939	153	96	
1940	149	103	
1941	136	79	
1942	113	80	
1943	121	73	
1944	125	92	
1945	139	85	

who signed the certificate; name of the person representing the deceased, his age, occupation, home address, and nationality; names of two witnesses, with their age, occupation, home address, relationship to the deceased, and nationality; signatures of the representative and the two witnesses; and at the margin, indication of the type or class of burial, receipt number, municipal treasurer's seal and signature, and fingerprint of the representative of the deceased. Because no one may be buried in the cemetery (which belongs to the municipality) unless the death is registered and fees have been paid, the record of deaths is the most complete of all forms of vital statistics for the period since 1860. Probably only a few stillbirths and young infants are not recorded.

Among the more important facts that can be derived from the records are fluctuations in the mortality rate, incidence of epidemic years, age-sex-cause of death relationships, relative importance of various diseases, and season and months of greatest mortality. By comparing the figures in table 12 with the population figures for the municipality and for Quiroga and its ranchos (pp. 62-64), one can get a rough impression of fluctuations in the mortality rate.

MORTALITY RATES

Probably the outstanding conclusion derived from table 12 is that from the beginning of records in 1860 until 1936 there were numerous and rapid changes in the number of deaths which cannot be explained by population changes. These variations were due to the frequent incidence of such diseases as smallpox, measles, whooping cough, typhoid and paratyphoid fevers, typhus, and scarlet fever, which would kill or immunize for a season and then remain relatively dormant until another crop of susceptible children had developed. Since 1936 the mortality rate has remained fairly fixed and comparatively low, probably because Quiroga has had doctors in residence since that date. During the 9 years of our most recent record (1937-45) we will assume that Quiroga and its ranchos had an average population of about 4,000. During this period there were 806 deaths, or an average of about 90 a year. This would yield a death rate of 22.5 per thousand inhabitants, which can be compared with the rate of 22.4 for Michoacán and 23.2 for all Mexico in 1940. In 1943 the rate for Mexico was 21.5 per

occupation, birthplace, place of residence; and parents of the deceased; death certificate (if presented), cause of death, name of the physician

thousand. Apparently, Quiroga is a typical community insofar as death rate is concerned.

CAUSES OF DEATH

During the entire colonial period we have no specific mention of mortality in Quiroga. However, the fact that Quiroga was involved in at least two congregations (ca. 1534 and 1603), and its location in the Pátzcuaro Basin, would justify the conclusion that the various pests, plagues, and epidemic diseases mentioned by the chroniclers for Michoacán played their part in Quiroga. The Mexican terms *cocoliztle* and *matlazahuatl* apparently were used by the chroniclers for lethal epidemics in general and for certain specific diseases, such as smallpox, typhus, typhoid, and possibly yellow fever and cholera. Under the above Mexican terms, the Tarascan *teresequa* (an "issue of putrid blood"), and the general terms *peste* (pest), *plaga* (plague), and *enfermedad general* (epidemic), Michoacán was scourged on many occasions during the colonial period. Especially severe were the plagues of 1536-37, 1544-46, 1554-55, 1563-64, 1576-78, 1588, 1643, 1735-37, 1749-50, 1761-62, 1779, and 1813-14. The Pátzcuaro Basin suffered most in 1545 (smallpox and possibly an unknown disease, which were credited with killing one-half to five-sixths of the population of Michoacán), 1563-64 (measles and another disease), 1576-77, and 1643. Smallpox, by itself or in conjunction with unidentified diseases, ravaged periodically from 1520 into this century. The worst smallpox epidemics were in 1520-21, 1532, 1538, 1545, 1559, 1576, 1579, 1592, and thereafter about every "12 or 18 years." Measles was a lethal epidemic during most of the colonial period and into the present century. The worst measles epidemics in Michoacán were in 1563, 1595, and 1821. Also operating were famine years produced by crop failures, especially in 1692-96, 1749-50, and 1783-86. Although introduced diseases and famine took the greatest toll, there was an increase in mortality due to Spanish-introduced changes in clothing, diet, and working conditions. During the colonial centuries a certain amount of immunity became established in the population, but smallpox continued to ravage even though vaccination was introduced into Michoacán as early as 1829, and inoculation had been attempted toward the end of the eighteenth century.

The history of diseases in Michoacán from 1821 into the 1860's is quite incomplete. However, notable years and epidemics were: 1833-36 (especially 1836) and 1850-54 (especially 1850) for cholera; 1839-40, 1858, and 1869-70, smallpox; 1836-40 scarlet fever; 1860 typhus and possibly yellow fever; 1862 and 1865 typhoid; and typhus again in 1863 and 1869. Civil wars and the movement of troops during the French Intervention undoubtedly made the 1830's, 1850's, and 1860's especially bad.

For the period of record, 1860 to date, we made a sampling of the years 1860-64, 1867-68, 1873-80, 1882-84, 1897-99, 1904-10, and 1937-45. No causes of death were indicated for the years 1860-62, and only a few (35 out of 515 deaths) in the years 1863-64 and 1867-68. Some time between 1869 and 1873 began the indication of causes for practically all deaths, since such data are available for 1873 and thereafter. However, very few deaths were accompanied by a physician's certificate of cause of death until after 1936, although medical terminology begins to appear in the records as early as 1878. From 1878 until about 1914 Quiroga had from one to three resident doctors, and their fine hand can be seen in the introduction of such terms as *tos ferina* (whooping cough) instead of simple *tos* in 1878, peritonitis and enterocolitis introduced in 1883, anemia cerebral and uretovaginitis introduced in 1884, and others in increasing numbers in later years. From some time during the revolution (ca. 1915) until 1936 there were no resident doctors in Quiroga, excepting two in 1925-27, and an occasional pharmacist *sin título* (unlicensed or without diploma) who would sell patent medicines and other drugs and provide "practical" information and suggestions. Consequently most of the causes of death entered from 1873 until 1937 represent the terminology and knowledge of folk or home medicine. A few causes of death can be accepted without question, such as *viruelas* (smallpox), *sarampión* (measles), and the various forms of violent death (knife wounds, bullet, lightning, etc.). A larger number of deaths can be placed in fairly certain groups; e. g., *fiebre* or fever most commonly was typhoid or paratyphoid fever or typhus, *calenturas* and *fríos* and intermittent fevers usually were forms of malaria, *ética* or *ectica* and *tisis* or *ticis* were respectively infantile and adult tuberculosis, *bilis* or *vilis* was an infec-

TABLE 13.—*Chief causes of death from 1873 to 1910, Quiroga*

Year	Total deaths	First		Second		Third		Fourth		Fifth ¹	
		Disease	Number of deaths	Disease	Number of deaths	Disease	Number of deaths	Disease	Number of deaths	Disease	Number of deaths
1873	219	Smallpox	86	Dysentery	30	Diarrhea	22	Pneumonia	6	Unknown	16
1874	155	Dysentery	17	Diarrhea	14	<i>Dolor costado</i>	13	Violent	13	do	19
1875	129	do	22	do	15	Pneumonia	10	do	7	do	9
1876	166	do	47	Fever	17	Dropsy	10	<i>Tos</i>	8	do	15
1877	197	Smallpox	36	do	22	Dysentery	20	Pneumonia	10	do	23
1878	222	Dysentery	59	Smallpox	28	Pneumonia	18	<i>Dolor costado</i>	11	do	20
1879	247	do	60	Fever	45	do	25	Measles	19	do	15
1880	171	do	41	do	28	do	16	Whooping cough	16	do	10
1882	136	Pneumonia	22	Dysentery	19	Smallpox	13	Fever	7	Dropsy	6
1883	239	Smallpox	91	do	30	Pneumonia	30	<i>Bilis</i>	8	Unknown	11
1884	203	Diarrhea	28	Smallpox	20	Dysentery	20	Whooping cough	15	Pneumonia	15
1897	123	Enteritis	29	At birth	18	Pneumonia	9	Anemia	7	Senility	6
1898	193	Smallpox	61	Enteritis	27	do	18	At birth	14	do	8
1899	192	do	25	do	23	At birth	16	Enterocolitis	13	Measles	9
1904	145	Enteritis	20	Enterocolitis	17	Pneumonia	14	Gastroenteritis	12	At birth	10
1905	147	do	28	do	20	Gastroenteritis	16	Smallpox	7	Unknown	6
1906	154	Smallpox	18	Gastroenteritis	18	Enterocolitis	10	Whooping cough	8	Pneumonia	7
1907	174	Pneumonia	24	Enteritis	21	do	17	Gastroenteritis	8	Diarrhea	8
1908	163	Enteritis	20	Pneumonia	15	Bronchitis	13	Enterocolitis	12	Tuberculosis	9
1909	148	Pneumonia	18	Enteritis	16	At birth	13	do	12	Gastroenteritis	11
1910	221	Smallpox	21	do	21	Pneumonia	19	Bronchitis	15	Scarlet fever	12

¹ The number of deaths from unknown causes is shown whenever it falls among the first 5.

tion of the liver, *angina* or sore throat was commonly either diphtheria or a streptococcus infection, *pulmonia* was some form of pneumonia, and *cólico*, *torzón*, *diarrhea*, *disenteria*, *tapiado*, *enteritis*, and *fiebre intestinal* represented various gastrointestinal diseases. A very large number of deaths, especially of babies, were attributed to such descriptive causes as *inflamación* (inflammation), *dolor* (pain), *debilidad congénita* (congenital debility) or *recién nacido* (just born)—often premature births or babies injured when removed by the midwife—and *falta de cuidado* (lack of care)—exposure to cold, lack of food, uncleanness. Among adults there were numerous deaths attributed to *agotamiento* and *vejez* (senile debility or exhaustion), but undoubtedly in many of the younger adults this represented merely cachexia. Other general terms included *ataque* (attack or fit), *insulto* (sudden illness), *muerte repentina* (sudden death), and *hidropesía* (dropsy).

Because of variation in terminology and in the use of a physician's certificate we present the chief causes of death in the periods sampled in two tables (Nos. 13 and 15). Table 13 includes the years of least reliability. In the 21 years listed in table 13 there were 3,749 deaths. According to the terminology of entry the first 10 causes of death (which accounted for 55 percent of the total) were smallpox, dysentery, pneumonia, enteritis, premature birth or death at birth, fever, diarrhea, enterocolitis, whooping cough, and senility, in that order. However, if we analyze

the returns and compare the figures for 1873–84 with those of 1897–1910 there are indicated many changes in terminology and a considerable refinement of diagnosis. This is especially true of the gastrointestinal and the respiratory diseases, which are two of the three most important groups. The changes in terminology are apparent in table 14. It is apparent that most of what had earlier been termed dysentery was not really amoebic or bacillary dysentery, and most of such cases (and those of diarrhea and colic also) were distributed among the enteritis diseases. Bronchitis and influenza apparently were separated from pneumonia in the later period, and better diagnosis added to the number of cases of tuberculosis (consumption of the lungs).

TABLE 14.—*Gastrointestinal and respiratory diseases causing death in 1873–84 and in 1897–1910*

Disease group and cause of death	Number of deaths		Total deaths
	1873–84	1897–1910	
Gastrointestinal disease:			
Dysentery	365	25	390
Enteritis	0	188	188
Diarrhea	95	26	121
Enterocolitis	0	112	112
Gastroenteritis	0	70	70
Colic	40	12	52
Total	500	433	933
Respiratory diseases:			
Pneumonia	177	135	312
Bronchitis	0	66	66
Tuberculosis	19	38	57
Influenza	0	4	4
Total	196	243	439

The ranking among the contagious diseases (other than those listed previously) was as follows: Smallpox, 413 cases; fevers, 195 (unspecified fever 154, typhus 30, typhoid 11); whooping cough, 112; malaria, 51; measles, 47; diphtheria, 23; and scarlet fever, 14. It will be noted that nearly every year with more than an average number of deaths (178.5) was a year in which smallpox and/or fever was in first or second place among the causes of death, as in 1873, 1877, 1878, 1879, 1883, 1884, 1898, 1899, and 1910. The 12- or 18-year cycle for smallpox reported from the colonial period shows up as a 10- or 15-year cycle (1873, 1883, 1898, ca. 1910) for peak years, with an incidence of more than 4 cases every 4 years (1873, 86 cases; 1877, 36 cases; 1878, 28 cases; 1882, 1883, 1884, with 13, 91, and 20 cases; 1898 and 1899, with 61 and 25 cases; 1905 and 1906, with 7 and 18 cases; and 1910 with 21 cases). Although many of the cases reported simply as fever were undoubtedly of a variety of diseases, probably the majority were typhoid, paratyphoid, and typhus, but especially typhoid. From 1873 onward there were a few typhus cases listed for nearly every year, the most being 6 cases in 1884, and 4 each in 1878 and 1879. However, State records show that 1876–77, 1879–81, and 1893 were typhus years; and our records show the greatest number of unidentified fever cases in 1876 (17 cases), 1877 (22), 1879 (45), and 1880 (28). The proportion of typhoid to typhus is uncertain, but the term “typhoid” does not appear in the records until the 1880’s, and then the number in any 1 year does not go above 3. Undoubtedly there were many more cases of typhoid than appear in the records. State and local records stress 1879 and 1881 as typhoid years.

A medical geography of Michoacan in 1884 lists the most deadly diseases in Quiroga as “catarrhal infections,” smallpox, typhoid, and pneumonia. Whooping cough and diphtheria were consistently present, and whooping cough was at its worst in 1875–84 and 1906–07. Malaria (in various forms) was present in practically every year, but the toll was never higher than 8 in 1879 and 5 each in 1874, 1907, and 1910. More than half of the years had no deaths from measles, and only 1879 (19 cases), 1899 (9 cases), and 1910 (7 cases) could be considered as measles years. We cannot explain the apparent low incidence of scarlet fever, especially since 12 of the 14 cases were reported in 1910.

The remaining chief causes of death were: Violent death in all forms, 83 (knife wounds, 40; falls and blows, 18; bullet wounds, 8; drowning, 7; lightning, 6; suicide by hanging, 2; and burns, 2); old age or decrepitude, 73; dropsy, 65; *dolor de costado* or sideache (appendicitis in part), 45; liver ailments, 40; and death in childbirth, 37. It is of interest that 33 of the deaths from knifing occurred in the first 11 years of our record. The records of death from old age, dropsy, and sideache are practically valueless as far as specific diseases are concerned. We have not considered it worth while to discuss the practically anonymous deaths from pains, inflammation, attacks, headaches, and the like. A scattering of deaths occurred from such causes as asthma, acute drunkenness, afflictions of the heart and of the nervous system, venereal diseases, hemorrhages, apoplexy, hernia, tumor, cancer, hydrophobia, epilepsy, erysipelas or *mal de San Antonio*, gangrene, paralysis, rheumatism, and *lázaro* or leprosy. One person died of leprosy about every 5 or 6 years.

TABLE 15.—Chief causes of death from 1937 to 1945, Quiroga

Year	Total deaths	First		Second		Third		Fourth		Fifth	
		Cause of death	Number of deaths	Cause of death	Number of deaths	Cause of death	Number of deaths	Cause of death	Number of deaths	Cause of death	Number of deaths
1937.....	113	Diarrhea.....	26	Exhaustion.....	14	Bronchitis.....	8	Grippe.....	8	Colic.....	7
1938.....	85	do.....	17	Bronchitis.....	17	Gunshot.....	6	Pneumonia.....	4	Smallpox.....	4
1939.....	96	Gastroenteritis..	22	Exhaustion.....	14	Pneumonia.....	8	Bronchitis.....	7	Gunshot.....	4
1940.....	103	Exhaustion.....	23	Gastroenteritis..	16	Diarrhea.....	8	Pneumonia.....	8	(¹).....	4
1941.....	79	Gastroenteritis..	9	Diarrhea.....	8	Exhaustion.....	7	Malaria.....	6	Bronchitis.....	5
1942.....	80	Bronchitis.....	12	do.....	11	Liver.....	8	do.....	6	(¹).....	4
1943.....	73	Diarrhea.....	15	Exhaustion.....	8	Vomit.....	7	Pneumonia.....	6	Measles.....	5
1944.....	92	do.....	17	do.....	15	Bronchitis.....	6	Fever.....	6	Vomit.....	5
1945.....	85	Exhaustion.....	17	Bronchitis.....	13	Pneumonia.....	7	Diarrhea.....	6	Gastroenteritis..	6

¹ In 1940 and 1942 several diseases tied for fifth place, with 4 deaths each.

In the 9 years shown in table 15 there were 806 deaths in Quiroga and its ranchos. The absolute number of deaths and also the rate are about one-half of what obtained in the second half of the nineteenth century. The outstanding fact is the practical elimination of smallpox, owing primarily to the extensive governmental campaign of vaccination during the past 20 years. Also, deaths from pneumonia, fevers, and whooping cough, and infant deaths were materially reduced. Much of this probably represents the presence of at least one doctor in residence ever since 1936 when the Servicio Médico Ejidal was established in Quiroga under Dr. Carlos Ramírez Parraguirre 1936-39, and continued under Dr. Arturo H. Rascón 1939-41. Dr. Rascón returned in 1944 and took up private practice in Quiroga. About 1937 to 1940 a doctor of the Secretaría de Comunicaciones y Obras Públicas was in Quiroga while the main highway from Mexico City to Guadalajara was being improved in this area. Since 1941 usually there has been one doctor of the Servicio Médico Social resident in Quiroga. Although there is no local hospital, the present improved communications make it a simple matter to get to hospitals in Morelia, and there are two drug stores in Quiroga. Although a reduction in mortality has been coincident with the presence of physicians, it is not certain that the diagnosis of causes of deaths has improved materially. Only about 60 percent of the death records are accompanied by a physician's certificate. This is because most of the people in the ranchos and many of the poorer people in town do not have a doctor in case of illness, and this is especially true in the case of sick babies and old people. Furthermore, entirely too many deaths are attributed to *agotamiento* or exhaustion, including those of babies, middle-aged, and old people. Also, there are still entered such noncommittal causes as fever and *vómito* or vomit (especially for babies).

In 1937-45 (see table 15) the first 10 causes of death (which comprise 68.7 percent of the total) are: Diarrhea, 110; exhaustion, 103; bronchitis, 76; gastroenteritis, 59; violent deaths, 49; pneumonia, 47; liver disorders, 42; heart diseases, 23; "vomit," 23; and malaria, 22. The next group of 10 includes: Grippe, 18; enteritis, 18; colic, 16; measles, 16; fever, 15; whooping cough, 14; premature births and stillborns, 9; enterocolitis, 9; cerebral hemorrhage, 9; and several diseases with

eight cases each, such as childbirth, dysentery, and tumors. The chief groupings are: Gastro-intestinal diseases, 220; respiratory, 145; debility-anemia, 116; contagious diseases, 80; violent deaths, 49; diseases of the liver, 42; uncertain causes, 31; and heart diseases, 23. It will be noted that in the medical terminology diarrhea has gained at the expense of dysentery, gastroenteritis is favored over enteritis and enterocolitis, and that bronchitis has replaced pneumonia, and grippe is used instead of influenza. Much of this was caused by changes in certificate regulations about 1926.

For purposes of comparison we have regrouped the causes of death according to the plan followed by the Mexican Government in vital statistics. However, the large and practically anonymous group of deaths listed in Quiroga under such headings as exhaustion, general exhaustion, senile exhaustion, anemia, premature birth, congenital debility, asphyxia, pain, fever, and vomit (and also those with no cause of death indicated) we have arbitrarily divided on the basis of age. The infantile group includes all deaths from the above "causes" in children under 2 years of age. The general ill-health or cachexia group includes individuals from 2 years of age (actually beginning about 5) to 49, and the senile debility group has been restricted to individuals of 50 or more years of age (although one babe of 1 month and several individuals under 20 years were listed as dying of senile exhaustion!). It has been assumed that the average population of Quiroga and its ranchos was 4,000 for the period 1937-45. The total number of deaths from a specified cause has been divided by 9 to obtain the average number per year, and this figure has been divided by 4 to obtain the rate of death per 1,000 of population (table 16). Comparisons in rank and rate for Michoacán and Mexico as a whole are given for the specified years (table 16).

It is evident that due to distribution of Quiroga deaths among senile exhaustion, infantile deaths, and cachexia, not all of the rates are strictly comparable. However, such causes as violent deaths, malaria, measles, whooping cough, typhoid, tuberculosis, smallpox, and alcoholism can be compared. There seems to be a trend in Quiroga to diagnose as bronchitis rather than pneumonia, to stress enteritis at the expense of

TABLE 16.—Comparison of deaths in Quiroga with those in Michoacán and in Mexico

Cause of death	Rank and rate of deaths per year ¹										
	Quiroga		Michoacán, 1933-39		Mexico, 1938		Mexico, 1937		Mexico, 1931	Mexico, 1922	
	Rank	Rate ²	Rank	Rate	Rank	Rate	Rate	Rate	Rank	Rank	Rate
Diarrhea and enteritis.....	1	5.89	1	4.92	1	4.25	1	4.33	1	2	1.78
Senile exhaustion.....		2.94									
Bronchitis.....	2	2.14	5	.90	7	.58	7	.65	10	8	.60
Infantile miscellaneous.....		1.52									
Pneumonia.....	3	1.36	2	2.52	2	3.20	2	3.55	2	1	2.34
Violent deaths.....	4	1.36	4	1.47	4	1.07	4	1.03	4	7	.64
Liver ailments.....	5	1.17	3	1.53	17	.20	16	.23	18	19	.11
Cachexia.....		1.06									
Heart diseases.....	6	.64	(*)		10	.45	11	.49	11	12	.23
Malaria.....	7	.61	6	.82	3	1.27	3	1.35	3	3	1.73
Influenza.....	8	.50	10	.35	16	.21	12	.45	13	10	.50
Measles.....	9	.44	7	.80	11	.45	6	.73	14	14	.15
Whooping cough.....	10	.39	9	.73	6	.78	8	.61	9	4	1.00
Cerebral hemorrhage, apoplexy, etc.....	11	.33	(*)		15	.22	17	.20	16	13	.20
Diseases of the nervous system.....	12	.25	(*)		5	.92	5	.78	5	(*)	(*)
Dysentery.....	13	.22	8	.76	9	.52	9	.56	7	9	.58
Childbirth.....	14	.22	(*)		(*)	(*)	(*)	(*)	(*)	(*)	(*)
Tumor.....	15	.22	(*)		(*)	(*)	(*)	(*)	(*)	(*)	(*)
Typhoid.....	16	.19	(*)		13	.28	15	.29	12	11	.33
Tuberculosis.....	17	.17	(*)		8	.55	10	.79	8	6	.79
Nephritis.....	18	.14	(*)		14	.27	14	.31	17	17	.12
Smallpox.....	19	.14	(*)		20	.17	20	.18	6	5	.83
Alcoholism.....	20	.14	(*)		27	.07	26	.08	26	(*)	(*)

¹ The asterisk indicates that the disease was not among the top 10 for Michoacán, top 31 for Mexico in 1938, 1937, and 1931, or top 24 for Mexico in 1922.

² Average number of deaths per year per 1,000 population for Quiroga in 1937-45.

dysentery, and to overlook many cases of tuberculosis, diseases of the nervous system, and possibly typhoid. It is noteworthy that Quiroga has comparatively high rates of death from diarrhea and enteritis, bronchitis, violence, liver ailments, heart diseases, cerebral hemorrhage, childbirth, tumor, and alcoholism. During the 9 years of recent record there were no deaths by suicide, or from leprosy, hydrophobia, paralysis, or scarlet fever; and there were but one death from epilepsy, one from tonsillitis, two each from diabetes, syphilis, erysipelas, and diphtheria, and three each from cancer and typhus. We can conclude that probably the majority of deaths are caused by lack of care of infants and by various water-borne infections. Although violent deaths have maintained a rather constant position in Quiroga, guns have tended to replace knives in the settlement of disputes (21 bullet versus 8 knife wounds), and motor accidents have assumed more importance. Most of the deaths from automobiles are caused by being hit by a car. We understand that during the late 1920's and the 1930's, when automobile and bus traffic began to assume importance, many pedestrians were killed. This was because the local inhabitants were not accustomed to the speed of automobiles, and also because they at first used the middle of the roads whether they were proceeding on foot or on a beast.

SEASONS OF DEATH

We sampled 32 years (distributed from 1860 to 1945) to determine the variations in month and season of death. There were a total of 4,689 deaths which occurred as follows: July, 619; June, 543; August, 447; May, 443; April, 394; September, 373; November, 345; March, 326; October, 324; February, 299; December, 288; and January, 288. July was the most mortal month 11 times, was in second place 9 times, in third place 6 times, in fourth place 4 times, and never was in last position (twelfth). June led 11 times, was second 3 times, was third 6 times, was in fourth place 3 times, and was in last place once. August was in first place 3 times, was second 5 times, in third 2 times, in fourth place 5 times, and was in twelfth place once. May was in first place 3 times, in second 5 times, in third 7 times, in fourth 3 times, and was last twice. January had the fewest deaths on 8 occasions; December, 4 times; February, 8 times; October, 5 times; March, 3 times; November, 3 times; and September, 5 times. The rankings do not add up to 32 because on a number of occasions 2 or 3 months would have the same number of deaths and would be given the same rank. For Mexico as a whole, August is the most deadly month, and in Michoacán as a whole, the order is July, August, and April (averaged for 1933-39 only). The years with compara-

tively few deaths tend to have the greatest departure from the norms in the monthly distribution of deaths. This would indicate that the seasonal incidence of the more lethal diseases determines the norms of distribution. The mortalities can be distributed along a fairly smooth curve which begins with December, January, and February (the season with fewest deaths), swings up slightly in March and yet more in April, runs strongly upward through May and June to a climax in July, falls off somewhat in August and September, and continues downward in October, although there is a slight upward movement in November before completing the cycle into December.

The gastrointestinal diseases (including dysentery) are most common from April to August, with a peak in June-July and a minor peak in November. Typhoid and paratyphoid fevers are most prevalent in July, August, and September. The explanation of this coincidence with the summer period is that the heavy rains commonly begin toward the end of June, and for 2 or 3 months the sources of potable water are strongly polluted. As the filth that has accumulated during the dry season is leached out and evacuated from the soils the waters in the springs, wells, and streams become cleaner and the incidence of water-borne infections decreases. Diseases of the respiratory tract are most manifest during the relatively cool and dry season, or winter, from November to May, with a peak in April. Although modern incidence of smallpox, whooping cough, and typhus, tends to be low and scattered, the records over the longer period show the strongest concentrations of deaths from these diseases in the November to May period. Malarial deaths are most common December to June. It formerly was assumed that after the winter and spring attacks of smallpox would come the scourge of measles, and there is still a tendency toward concentration of measles between April and September. Perhaps because of the general debilitating effect of the water-borne infections more than half of other deaths (such as senile exhaustion, cachexia, and deaths of unknown cause) occur in the May to August period.

AGE AND DEATH

Throughout the medical history of Mexico and of Michoacán the infant (less than 1 year of age)

mortality has been exceedingly high. This condition obtains in Quiroga, where usually at least one-third of the deaths in any year are of infants under 1 year of age, and where in more than half of the years children under 4 constitute more than half of the deaths. Some changes in age distribution of deaths are indicated by table 17, which shows the raw figures for the 1867-77 and 1937-45 periods.

TABLE 17.—Deaths by age groups for 1867-77 and 1937-45

Year	Total deaths	Deaths in age group—									
		0-12 mos.		13 mos.-3 yrs.		4-7 yrs.		8-14 yrs.		Total (0-14 yrs.)	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1867	146	56	37	17	10	4	1	63	114		
1868	125	29	23	10	8	1	1	63	114		
1873	219	47	67	29	8	1	1	151	151		
1874	155	55	16	8	5	2	2	84	84		
1875	129	38	24	13	2	3	3	77	77		
1876	166	51	36	7	3	97		97			
1877	197	54	39	20	15	128		128			
Percent.	100	29.02	21.28	9.14	3.34	62.78					
1937	113	37	22	6	4	69		69			
1938	85	31	8	6	1	46		46			
1939	96	30	7	4	3	44		44			
1940	103	26	7	6	7	46		46			
1941	79	23	5	2	4	34		34			
1942	80	32	8	5	8	56		56			
1943	73	24	11	5	1	41		41			
1944	92	34	2	7	1	44		44			
1945	85	32	6	5	4	47		47			
Percent.	100	33.37	9.42	6.07	4.09	52.97					

The principal change between the 1860-70's and the 1930-40's has been a lowering of the proportion of children's deaths (from 62.78 percent to 52.97 percent), which has been accomplished chiefly in the 13-month to 3-year group since the proportion of infant deaths has increased. Our data conform fairly closely with the national percentage of 47.4 and that for Michoacán of 46.7 (computed for 1937-39) comprising children under 5 years of age. For the period 1940-45 there were 150 infant deaths per thousand infants less than 1 year of age, which can be compared with the Mexican rate of 116.6 in 1943. It is evident that the critical period is from birth until the fourth year of age. Other than those who die at birth or without diagnosis, the majority of children under 15 in Quiroga die from diarrhea and enteritis, bronchitis and pneumonia, influenza, measles, whooping cough, and dysentery—in that order. Probably the diseases of the digestive and respiratory organs account for more than half of the deaths of children. In recent years smallpox,

diphtheria, scarlet fever, and meningitis have not been important causes of death. More than 80 percent of those who die of whooping cough, measles, diphtheria, "vomit" and smallpox are under 15 years of age. Considering the entire population, we can generalize that in years with a comparatively low number of deaths there is a more even distribution of deaths among the various age groups—always excepting the infants under 1 year. Approximately 3 percent of the deaths are in the 15 to 19 age group, 14 percent in the 20 to 39, 11 percent in the 40 to 59, and 19 percent in the 60 or older age group.

SEX AND DEATH

We did not analyze the age-sex-cause of death relationship very thoroughly. However, it is quite apparent that the mortality is greater both absolutely and proportionately among males than females from birth until at least the age of 19. Probably the females maintain an advantage for 10 or 15 more years, since deaths in childbirth are far offset by violent deaths among males. Among the children under 15 we did not find any cause of death in which there were proportionately more females than males. Among adults there appeared to be a slight preponderance of female deaths from such causes as tumor, cancer, rheumatism, and senile exhaustion.

NATURAL INCREASE IN POPULATION

From 1940 to 1945 inclusive, there were 1,139 births and 512 deaths in Quiroga and its ranchos. This represents a net increase of 627 individuals, which yields a rate of about 26.1 per thousand inhabitants per year. This can be compared with the national average of 20.4 and the average for Michoacán of 22.3 (computed for the period 1936-40). In other words, Quiroga has an annual rate of increase of about 2.6 percent. However, it must be kept in mind that this is the natural rate of increase, and no allowances have been made for migration into and out from Quiroga. Actually, between the March 6, 1940, census and our census (which can be considered as of June 30, 1945) there were 945 births and 449 deaths, for a net gain of 496. Nevertheless, the gain indicated between the two censuses was only 260, which would indicate that 236 were away temporarily (*braceros* et al.) or had moved permanently.

ORIGINS OF THE POPULATION

The population of Quiroga and its ranchos is predominantly of local origin. From a study of the civil and parish records (where place of birth is given with nearly every inscription) it would be possible to make an exact study of the origins of the population for the past 150 years, but we contented ourselves with the returns of the 1940 census and of our census of 1945. The Federal census of 1940 gives only the State or country of birth and the nationality. In 1945 we obtained not only State or country of birth, but also birth-place within Michoacán. The results are given in tables 18 and 19.

TABLE 18.—*Origins of inhabitants of Quiroga, according to 1940 and 1945 censuses*

Subdivision	Total population		Number of inhabitants born in Michoacán		Number of inhabitants born in other entities					
	1940	1945	1940	1945	1940			1945		
					Total	Entity	Number per entity	Total	Entity	Number per entity
Cuartel I...	701	800	694	779	7	{Guato. Jal. Col. Gro.	3 2 1 1	21	{Guato. Jal. D. F. Chih. Gro. Pbia. Tam. Guato. D. F.	10 4 2 2 1 1 1 4 2
Cuartel II...	857	780	856	766	1	Jal.	1	14	{Jal. Pbia. Coah. Calif. Guato. Jal. D. F. Aguas.	2 2 1 1 5 2 2 2
Cuartel III...	794	894	782	881	12	{Jal. D. F. Aguas. Guato. Tam. Italy	6 2 1 1 1 1	13	{Jal. D. F. Aguas. D. F. Mex. Quer. V.C. D. F. Jal.	5 2 1 1 1 1 3 3
Cuartel IV...	657	687	657	680	0	-----	0	7	{Guato. Jal.	1 1
Ranchos...	890	998	890	997	0	-----	0	1	{Mex. Guato. Jal. D. F. Pbia. Chih. Aguas. Mex. Coah. Gro. Quer. Tam. V.C. U. S. A.	1 20 11 10 3 2 2 2 1 1 1 1 1 1
Total...	3,890	4,159	3,879	4,103	20	{Jal. Guato. D. F. Aguas. Col. Gro. Tam. Italy	9 4 2 1 1 1 1 1	56	{Jal. Guato. D. F. Pbia. Chih. Aguas. Mex. Coah. Gro. Quer. Tam. V.C. U. S. A.	10 11 10 3 2 2 2 1 1 1 1 1 1

At first glance it would appear that the number of out-of-state residents had almost trebled between 1940 and 1945. We have reason to believe that the 1940 census takers overlooked a number,

so that the increase is only in the nature of doubling. With the exception of individuals born in the neighboring States of Guanajuato and Jalisco, the majority of out-of-state residents are governmental employees (teachers and physicians, chiefly) or tradesmen and artisans (such as photographer, pharmacist, tailor, mechanic, and the like). These individuals have been attracted to or sent to Quiroga because of the improvement in communications and business since 1939, and because of continued Federal participation in education, socialized medicine, and highway improvement. In 1940 there was just one person not a Mexican citizen (a man born in Italy). In 1945 there was one woman born in Corcoran, Calif., but she was of Mexican extraction and is a Mexican citizen. Consequently, there are no foreigners in Quiroga. By way of comparison, in 1900 there were no foreigners in the municipality of Quiroga; there were 29 individuals born in other States (Guanajuato led, with 10); and only 13 out of the 12,344 inhabitants had been residents of the municipality less than 1 year. It is noteworthy that the ranchos had no non-Michoacán residents in 1940, and but 1 in 1945.

Table 19 is more informative; it shows the birthplace of all the inhabitants who live in a community other than that in which they were born. Out of a total population of 4,159 there were 816 who were in this category. However, all but 56 of these were born within Michoacán. Of the 760 born in Michoacán, 582 were born outside of the municipality of Quiroga. The major portion, or 447, were born in adjacent municipalities, which would mean within a radius of 30 miles. The

municipalities which contributed most importantly to the population of Quiroga and its ranchos were: Tzintzuntzan 176, Morelia 171, Pátzcuaro 48, Zacapu 18, Chucándiro 17, Villa Jiménez 16, Erongarícuaro 14, Puruándiro 12, Coeneo 11, Acuitzio 10, Tingambato 10, Huaniqueo 9, and Arteaga 9. Of the 102 municipalities in Michoacán 34 were represented in the Quiroga population. The individuals who were born at a distance greater than 15 miles usually fell into one of four categories: Religious (priest, sacristan, and the Sisters in the religious school), State governmental employees, merchants and skilled artisans, or spouses (usually wives). Most of the movement within the municipality of Quiroga, and from Morelia and Tzintzuntzan, comprised laborers and tenant farmers. Within this group there was considerable shifting around within the area, and it was not uncommon for a family to be composed of a couple native to the town of Quiroga or one of its ranchos whose children would be born each in a different community. Within our area of study in the municipality of Quiroga, only four individuals were born in the dependent pueblos. This is a striking commentary on the slight connection with the western pueblos as compared with the ranchos and pueblos to the north, east, and south, including a number in Morelia and Tzintzuntzan. The ranchos of Quiroga have the largest absolute and relative native populations. There were 21 individuals involved in movements from one rancho to another (Zirandangacho with none had the least and La Tirimicua with 8 had the most of this interchange). Quiroga town contributed 18 persons ranging from none to Atzimbo

TABLE 19.—Birthplaces of inhabitants of Quiroga living in a community other than that in which they were born

Number of inhabitants born in places indicated																				Total migrants
Subdivision of Quiroga	Municipality of Quiroga								Adjacent municipalities						Other places					
	Atzimbo	Carfingaro	Icuácató	Sanambo	La Tirimicua	Zirandangacho	San Andrés	Santa Fe	Quiroga	Morelia	Tzintzuntzan	Pátzcuaro	Erongarícuaro	Zacapu	Coeneo	Huaniqueo	Remainder of Michoacán	Other States of Mexico	United States	
Cuartel I.....	4	1	1	5	2	0	1	1	-----	32	43	15	13	4	5	0	30	21	0	178
Cuartel II.....	13	2	12	16	6	1	2	0	-----	40	17	20	0	8	4	3	33	13	1	191
Cuartel III.....	5	0	8	4	16	0	0	0	-----	43	23	5	0	6	2	4	19	13	0	148
Cuartel IV.....	13	8	0	15	2	1	0	0	-----	35	56	7	1	0	0	2	49	7	0	196
Ranchos.....	1	4	6	5	5	0	0	0	18	21	37	1	0	0	0	0	4	1	0	103
Total.....	36	15	27	45	31	2	3	1	18	171	176	48	14	18	11	9	135	55	1	816

to 7 to Zirandangacho. The ranchos received 63 persons from outside the municipality, but most of these came from nearby ranchos; e.g., 10 from La Noria to Atzimbo less than a mile away, 9 from Cuenembo and Puerta de Cuenembo and 7 from Patambicho to Zirandangacho, etc. Sanambo is most strongly native with but 10 individuals out of a population of 299 who were not born in that rancho. Zirandangacho resembles a labor camp, since one-half of the population of 52 were born elsewhere.

In Quiroga town proper 713, or 22.44 percent, were born outside of the town. These figures are reduced to 574, or 18.15 percent, who were born outside of the municipality. *Cuartel* I, in the southwestern and most distant quarter of the town, had the fewest people from the ranchos (13), while *cuartel* II had the most (50) for no obvious reason. The largest rancho, Sanambo, contributed the most to Quiroga (40 persons); La Tirimicua, which has the closest economic and social connections with Quiroga, contributed the most proportionately (26 persons compared with a total population of 98); and the smallest rancho, Zirandangacho, provided but 2 persons. The largest number and proportion of outsiders are to be found in *cuartel* IV (196 persons, or 28.53 percent). This *cuartel* is the newest and poorest in Quiroga. During and since the revolution there has been a considerable immigration from the ranchos of Tzintzuntzan, especially Cuenembo (27), Patambicho (12), and El Tigre (9); and it is here that the migrants from the more distant parts of Michoacán tend to settle. There are less striking concentrations in the other quarters, although people from Morelia and Zacapu tend to settle in *cuarteles* II and III; and there is a certain concentration of people from Pátzcuaro, Coeneo, and outside of Michoacán in *cuarteles* I and II.

Some idea of the social and economic relationships between Quiroga and surrounding communities can be obtained from a listing of the communities which have contributed most importantly to the population of Quiroga and its ranchos. This listing is given in two categories (table 20): the first is of cities, towns, and villages including the persons born in dependent lesser communities in the immediate area; and the second is of the individual communities no matter what their size

TABLE 20.—Communities contributing most importantly to the population of Quiroga and its ranchos

Major jurisdictions less than a municipality	Number of persons born	Individual settlements of all categories	Number of persons born
Tzintzuntzan (Tzint.)	176	Morelia (Morelia)	55
Teremendo (Morelia)	68	Cuenembo (Tzint.)	54
Morelia (Morelia)	55	El Tigre (Tzint.)	33
Capula (Morelia)	44	Pátzcuaro (Patz.)	36
Pátzcuaro (Patz.)	41	Patambicho (Tzint.)	27
Chucándiro (Chu.)	17	Santa Cruz (Tzint.)	24
V. Jiménez (V. J.)	16	Sajo Grande (Morelia)	23
Erongaricuaro (Ero.)	14	Iratzio (Morelia)	21
Puruándiro (Pur.)	11	Tzintzimacato and Tzintzimacato Chico (Morelia)	19
Ario de Ros. (Ario)	10	Capula (Morelia)	13
Coeneo (Coeneo)	10	Chucándiro (Chu.)	13
Zacapu (Zacapu)	10	Pta. de Cuenembo (Tzint.)	11
Huaniqueo (Huan.)	9	Carupo (Morelia)	11
Arteaga (Arteaga)	8	Puruándiro (Pur.)	11
		Ario de Ros. (Ario)	10
		El Correo (Morelia)	10
		La Noria (Tzint.)	10
		Zacapu (Zacapu)	10
		Huaniqueo (Huan.)	9
		V. Jiménez (V. J.)	9
		Tzintzuntzan (Tzint.)	9
		Arteaga (Arteaga)	8
		Opungio (Erong.)	8
		Coeneo (Coeneo)	7

or status. The municipality is indicated in parentheses.

The contributing communities fall into a number of groups, but all of the important sources are highland settlements of temperate to cool climate in the surrounding area, mestizo population, and a basic agricultural economy. They constitute a region of common economy, history, and customs, and consequently have introduced few new or extraneous elements into the culture of Quiroga. The most important group comprises the communities which formerly were within the municipality of Quiroga, but which at present are in Tzintzuntzan. Next is the group made up of communities along the main routes to the State and district capital of Morelia, such as El Correo, Iratzio, Capula, and Morelia, as well as El Tigre of Tzintzuntzan which lies athwart of a main highway. In third place are the communities along the old route northward from Lake Pátzcuaro to Lake Cuitzeo via Sajo, Tzintzimacato and Chucándiro. The fourth important grouping is of settlements along the road southward to the local metropolis and former capital of Pátzcuaro and onward into the hot lowlands via Santa Clara and Ario de Rosales. It is noteworthy that the highest and most Indian area (the Sierra Tarasca) to the west and south has made practically no contribution to the population of Quiroga.

LOCAL AND TEMPORARY MOVEMENTS OF POPULATION

Within the municipality there is a considerable movement of families from one quarter of Quiroga to another, and between town and the ranchos of La Tirímicua and Zirandangacho. In part this is an attempt to get closer to the place or area of employment or work; but more importantly it is a shifting from one rented house to another, which shifts are conditioned by availability and rental rates. According to the 1940 census 61 percent of the families lived in their own houses, but this does not provide a true picture of the condition in the town of Quiroga since nearly all of the rancho families (excepting in Zirandangacho) own their homes, while in Quiroga proper the percentage is reduced to 51. Although we did not keep a complete check on local movements while we were in Quiroga, it was our impression that about 10 percent of the families shifted quarters within town during the period January 1945 to February 1946.

Most of the traveling is restricted to a radius of some 30 miles, and is usually for one or another of four reasons: to buy or sell in the daily and weekly markets of nearby communities, to participate in religious or other festivals, to visit relatives or friends, or to obtain temporary employment. The people of the ranchos travel much less than do those in town. Longer and more frequent trips are made by a very small number of people comprising the traveling merchants, *arrieros*, and chauffeurs who frequently go as far as Jalisco, Guanajuato, Guerrero, and the Federal District. Unfortunately, we made no exact check of the number of individuals who had ever been as far as Guadalajara or Mexico City, or outside of Mexico. However, our notes indicate that a comparatively large number had been to Mexico City. Such travel has increased in recent years with the introduction of several busses which pass through Quiroga headed for Mexico City every day.

Because Michoacán traditionally has sent more workers to the United States than any other Mexican entity, we made a survey of those who had

been in the United States or who were reported to be there. Since we did not talk with every male adult in Quiroga, although we interviewed some member of every family at least twice, our results probably are not quite complete. In 1945 there were 92 male residents of Quiroga (81 in town and 11 in the ranchos) who had been in the United States, and 18 (none from the ranchos) were reported to be there as *braceros*. This gives us a figure of 110 Quirogans who were or had been in the United States out of an adult (married or more than 20) male population of 1,000. It would be of interest to determine how this percentage of 11 would compare with those of other Mexican communities. Some of the Quiroga men had gone to the United States as early as 1904, but the majority had gone between 1915 and 1929, and more recently since 1942.

THE DISABLED AND DEFORMED

According to the 1940 census there were in Quiroga and its ranchos 23 individuals with specified defects which were distributed as follows: 8 cripples, 5 blind persons, 2 demented, 2 paralytics, 2 deaf, 1 deaf-mute, 1 mute, 1 humpback, and 1 person lacking 1 hand. Although we did not question for these items in our census, observation indicated that the numbers in the various categories ran about the same as in 1940. There may have been but 1 demented and 1 paralytic, and 2 individuals with humped backs. It is noteworthy that there was reported only one person with a defect (a crazy woman) from the ranchos, and but 3 (1 blind and 2 cripples) in the third *cuartel*. Although we noted a number of morons, there seemed to be no cretins or other types of idiots. The incidence of goiter, wens, and visible tumors was quite small. There was only 1 albino, and we saw no harelips. The most prevalent markings or disfigurations were from smallpox, although a number of the men carried visible scars from knife wounds.

Altogether, the population appealed to us as being able, well-informed, intelligent and clean. Such aspects of the population as race, language, religion, education, occupation, wealth, and habitation, are discussed elsewhere.

NAMES AND ETHNIC ORIGINS

The names of persons, both baptismal and surnames, are interesting in themselves and also often offer clues as to origins and other historical elements. By the time of the sixteenth century Spanish conquest and colonization of Mexico, family names or surnames (*nombres de familia, apellidos, sobrenombres*) were well established in the Iberian Peninsula, and essential stability had been attained in passing the patronymic from father to son and on to successive descendants. These trends were strengthened by the confirmation at the Council of Trent (1545-63) of the requirement that parish registers be kept in all churches.

From various lists of conquerors, *encomenderos*, citizens of Spanish settlements (*vecinos de villas y ciudades*), emigrants from Spain (*pasajeros a Indias*), *corregidores*, missionary and regular clergy, etc., we can obtain a fairly good idea of the family names involved and of the parts of the peninsula whence they came. Unfortunately, so far no one has made an intensive study of European surnames in Mexico, such as Thayer Ojeda (1917, 1919) has done for Chile. In the absence of such a study, we can only report our findings for Quiroga, and must leave comparisons with Mexico as a whole and with other parts of Mexico to another time.

QUIROGA SURNAMES

Our main source was the March 6, 1940, Federal census. We copied all 3,899 names of the inhabitants of our area (the Villa of Quiroga and its six dependent ranchos) from the original census forms, filed in Mexico City. The first step was to determine the number of people possessing each surname. All males and all unmarried females were entered under the father's family name. Wives, widows, and divorced women were entered under their maiden names. Since marital status was shown for all, and because of the consistent method of formation of the Spanish compound surname, little difficulty was encountered. All names, excepting those of illegitimate children, are composed of the baptismal name followed by the father's surname and the mother's surname. The two surnames may be joined by "y" (and), but this custom does not obtain in Quiroga and is not so common in Spanish America as it is in Spain. Occasionally a compound name will be

inherited as a whole, in which case it is also followed by the mother's maiden name, and thus gives rise to a tripart compound surname. In the Quiroga area this was true only for the Díaz Barriga family. Wives add the particle "de" (of) and their husband's patronymic to complete their names. Widows may insert "viuda" (widow) in front of the "de," in which case they usually drop the matronymic, but more commonly they revert to their maiden names. Examples illustrating the statements given above are shown in table 21.

TABLE 21.—Formation of names in Quiroga

First name	Compound surname	Relationship	Sex	Status
Diego.....	Fuentes Ayala.....	Head of family.	Male...	Married.
María.....	Villaseñor Ramos de Fuentes.....	Wife.....	Female	Do.
Salvador.....	Fuentes Villaseñor.....	Son.....	Male...	Single.
Luis.....	do.....	do.....	do.....	Do.
Ma. Trinidad.....	do.....	Daughter	Female	Do.
Rafaela.....	Díaz Barriga Gutiérrez.....	Head.....	do.....	Widow.
Luis.....	Sierra Díaz Barriga.....	Son.....	Male...	Single.
José María.....	do.....	do.....	do.....	Do.
Romana.....	do.....	Daughter	Female	Do.
Lucía.....	Huerta, Viuda de Valdovinos.....	Head.....	do.....	Widow.
Francisco.....	Valdovinos Huerta.....	Son.....	Male...	Single.
José.....	do.....	do.....	do.....	Do.
Felipe.....	Ramírez Barriga.....	Head.....	do.....	Married.
Luisa.....	Ramírez Aguilar de Ramírez.....	Wife.....	Female	Do.
Gregoria.....	Ramírez Ramírez.....	Daughter	do.....	Single.
Jesús.....	do.....	do.....	do.....	Do.
Luis.....	do.....	Son.....	Male...	Do.

At the time of the 1940 census there were 252 different family names represented in Quiroga. This number does not consider the variations in some names introduced by ignorance on the part of the informant or of the census taker, or by the common interchange of "b" and "v," of "s" and "z," of "l" and "r," of "c" and "s," of "p" and "b," of "c" and "z," of "e" and "i," of "o" and "u," of "a" and "e," of "i" and "y," of "y" and "ll," of "ll" and "ll," and of "r" and "rr," the use and omission of "h" before "o" and "u," and changes in gender and number. Illustrations of variations include: Abrego and Abrigo, Alva and Alba, Bernal and Vernal, Campo and Campos, Campuzano and Camposano, Ceja and Seja, Cendejas and Zendejas, Cortez and Cortés, Chávez and Chaves, Díaz and Díez, Espinoza and Espinosa, Gaitán and Gaytán, Gómez and Gomes, Ledezma and Ledesma, López and Lopes, Meza and Mesa,

Milián and Millán, Monroy and Monrroy, Olayo and Olallo, Ortiz and Ortís, Páez and Páiz and Baes, Pérez and Peres, Reynosa and Reinosa, Santoyo and Santollo, Servín and Cervín, Sorio and Soria, Téllez and Telles, Tovar and Tobar, Urquieta and Hurquieta, Valdés and Valdez, Valdovinos and Baldovinos, Vásquez and Vazquez, Vergara and Velgara, Zavala and Zabala, etc. Some of the variant forms have become standardized; e. g., the true patronymics most commonly are spelled to end in "-ez" rather than in "-es," and the "-es" form usually represents ignorance since that is a Portuguese and not a Castilian termination. Even among educated people there is not consistency, especially in the use of "b" and "v," and it is not uncommon to find different members of the same immediate family varying in their spelling of the family name. Some variants apparently have been crystallized for a long time and now represent different families, as in Pedraza and Pedroza and in Ferreyra (Ferrera) and Herrera, and a few of these were listed separately.

The number of persons per family name ranged from only 1 to 219. The first 4 family names (Barriga, Herrera, González, and Fuentes) embraced more than 17 percent of the inhabitants; the first 10 names, 30 percent of the population; and the first 25 names nearly 52 percent of the people of Quiroga. The following list gives the more important family names, arranged in the order of number of individuals bearing each name. These 101 names (each representing 8 or more individuals) comprise more than 88 percent of the total population.

Surnames in Quiroga

Family name:	Number bearing name	Family name—Con.	Number bearing name
Barriga.....	219	Hernández.....	60
Herrera.....	174	Estrada.....	60
González.....	144	Torres.....	56
Fuentes.....	140	Guzmán.....	54
Chávez.....	99	Ponce.....	53
García.....	91	Díaz.....	50
Calderón.....	86	Gutiérrez.....	50
Rodríguez.....	76	Chagolla.....	48
Campuzano.....	72	Rivera.....	47
Coria.....	70	Ruiz.....	47
López.....	68	Flores.....	42
Medina.....	67	Tovar.....	42
Peña.....	66	Anita.....	41
Valdovinos.....	64	Vázquez.....	41
Ortiz.....	60	Ramírez.....	39

Family name—Con.	Number bearing name	Family name—Con.	Number bearing name
Vargas.....	39	Orozco.....	14
Rangel.....	38	Reyes.....	14
Aguilar.....	38	Álvarez.....	13
Arriaga.....	36	Fabián.....	13
Pineda.....	33	Huerta.....	13
Farías.....	32	Urueta.....	13
Juárez.....	31	Mejía.....	12
Martínez.....	30	Monroy.....	12
Rico.....	29	Romero.....	12
Cázarez.....	28	Sorio.....	12
Pedraza.....	28	Fernández.....	11
Salmerón.....	26	Marínez.....	11
Garnica.....	25	Balderas.....	10
Magos.....	25	Caballero.....	10
Meza.....	25	Fuerte.....	10
Sierra.....	25	Hinojosa.....	10
Olayo.....	24	Rosales.....	10
Sánchez.....	24	Villicaña.....	10
Villanueva.....	23	Acosta.....	9
Gasca.....	21	Armenta.....	9
Servín.....	21	Coronado.....	9
Villalobos.....	21	Huacuz.....	9
Morán.....	20	Márquez.....	9
Saucedo.....	20	Rojas.....	9
Espino.....	19	Villaseñor.....	9
Sixtos.....	19	Alvarado.....	8
Cervantes.....	18	Corral.....	8
Mexicano.....	18	Cuín.....	8
Robles.....	18	Durán.....	8
Ayala.....	17	Gómez.....	8
Milián.....	17	Guillén.....	8
Frutos.....	16	Sagrero.....	8
Hurtado.....	16	Vega.....	8
Villa.....	16	Zamora.....	8
Castro.....	14	Zavala.....	8
Magaña.....	14		

The incidence of the remaining names was: 5 names with 7 persons, 6 names with 6 persons, 14 names with 5 persons, 13 names with 4 persons, 23 names with 3 persons, 21 names with 2 persons and 68 names with 1 individual. The family names represented by eight or fewer individuals commonly were restricted to 1, 2, or 3 family groups; and where there were only 1 or 2 persons with a certain family name they most frequently were women. Examples include: Espinoza, 5 persons in 1 family; Madrigal, 5 in 1 family; Oseguera, 4 in 1 family; Quintana, 7 in 1 family; Baltazar, 7 persons, 6 in 1 family and the wife in another family; Padilla, 7 persons, 3 in 1 family, and the wives in 4 other families; Cacari, 2 persons, 2 wives; Alfaro, Guerrero, Mendiola, Solorio, and Villegas, 1 person each, all wives or widows; etc.

CHANGES IN SURNAMES

For comparative purposes, 1,092 names were checked in the civil register lists of births, deaths, and marriages for scattered years from 1860 to 1873 (marriages 1860-63, births 1862-63 and 1873, deaths 1860-64). We may assume that the recorded 1,092 names represent an adequate cross section of the population of Quiroga some two generations ago. During the 1860-73 period there were represented 264 family names, which is slightly more than the 252 names in 1940. At the earlier period there were 114 names not present in 1940, but 102 names on the 1940 list were lacking. Most of these changes probably were in the families represented by only 1 or 2 individuals, of which there were 110 in 1940. Apparently the majority of the additions and losses of family names can be attributed to the temporary introduction of a name through marriage of a Quiroga man with a woman from the outside. From other sources we know that such marriages took place rather frequently within a radius of about 15 miles, and especially with women from the neighboring towns of Tzintzuntzan, Santa Fe, San Jerónimo, San Andrés, and Pátzcuaro, and the westerly ranchos dependent on Morelia. A less important source of change is to be found in the movements of State and Federal employees (tax collectors, soldiers, post-office employees, school teachers, highway workers, physicians, and the like), transport workers (*arrieros*, *choferes*, etc.), merchants, and artisans and craftsmen (masons, carpenters, painters, shoemakers, etc.).

The most notable change during the past two generations was in the ranking of the family names. Some families, such as the Barriga, González, Fuentes, Chávez, García, Calderón, Rodríguez, López, Medina, Peña, Valdovinos, Ortiz, Torres, Guzmán, Ponce, and Gutiérrez have maintained themselves in the upper brackets. A number have made great gains, such as the Herrera, Campuzano, Estrada, Díaz, and Flores families; and yet greater increases were registered by the Coria, Hernández, Chagolla, Rivera, Ruiz, Anita, Vázquez, Vargas, Arriaga, Pineda, and Juárez families. Great decrease is indicated for the Ramírez, Martínez, Rojas, Zavala, Pérez, Rangel, Aguilar, Valdés, León, Sánchez, Sierra, Castañeda, Delgado, Salmerón, Villanueva, and

other families. Some numerous families of the 1860's have become extinguished, such as the Duarte, Nava, Navarro, Tinoco, Cuiriz, Olachia, Salgado, Moreno, Olguín, Ontiveros, Oñate, Pizano, and Sayago. On the contrary, there are 10 new or renewed families, with more than 15 individuals each, namely, the Tovar, Farías, Cázarez, Garnica, Gasca, Villalobos, Morán, Sixtos, Milián, and Frutos.

The ranking of the top 43 families in the period 1860-73 was as follows:

Fuentes.	Pérez.
López.	Estrada.
Rodríguez.	Aguilar.
Ponce.	Valdés.
Barriga.	León.
Peña.	Sánchez.
Torres.	Sierra.
Guzmán.	Castañeda.
González.	Delgado.
García.	Duarte.
Ramírez.	Nava.
Calderón.	Salmerón.
Martínez.	Díaz.
Ortiz.	Villanueva.
Gutiérrez.	Campuzano.
Medina.	Flores.
Chávez.	Gómez.
Rojas.	Hurtado.
Valdovinos.	Roque.
Zavala.	Toledo.
Herrera.	Villicaña.
Rangel.	

Lacking precise information for most of the cases of extinguished families, and for families which have declined in representation, we must present a combination of theory and historical fact to explain the phenomenon of decrease. Although more males are born than females, more females survive, and there is normally a slightly larger number of females than males in the total population. When this general trend is united with the birth or survival only of females in a majority of the family groups with the same surname there results a general diminution of persons with that surname. So long as one or more males survive long enough to have progeny there is no extinction of the family name; but the coincidence of several successive generations of female predominance together with considerable impotency and celibacy among the males will extinguish the line. Along with this set of events is the emigra-

tion from the community of males to a somewhat greater extent than females. Revolutions and military service, opportunities for work outside of the community (especially in the larger cities, northern Mexico, and in the United States), and the financial, cultural, and sensual lures of the large cities, have taken many men and boys from Quiroga; and a considerable number of these never return to make a home in their birthplace.

The rise of new families is initiated by men or families moving in from the outside—usually from communities within northern Michoacán. Often this occurs when a Quiroga woman, or woman of a family which owns houses or lands in the area, marries an outsider, and the couple settles in Quiroga to benefit from the woman's possessions. Also, there has been a constant movement into Quiroga from the surrounding ranchos and towns that are or have been within the political and economic orbit of Quiroga. This hinterland includes all of the northern part of the basin of Pátzcuaro, from Tzintzuntzan around to San Andrés, and northward and eastward to include some of the communities in the *municipio* of Morelia. Whenever such families have numerous male offspring there results, in two generations, a marked increase in the number of persons carrying the family names involved.

COMPARISON WITH CHILEAN NAMES

For lack of comparable data in Mexico, we will contrast the more numerous families in Quiroga with those in Chile. According to a study by Thayer Ojeda (1917, 1919) of some 167,000 names compiled from various lists of some 40 years ago, there are many names in common, but the order of importance differs greatly, and many high ranking Chilean names are completely absent in Quiroga. This result is expectable, since we are comparing part of a *municipio* with a whole country. Probably comparison with other parts of Mexico would give quite different results. From the first 10 of the Chilean list only González, García, and Rodríguez appear in the first 10 in Quiroga. To these names can be added Herrera, López, Guzmán, Díaz, and Gutiérrez, which are in the top 25 places on both lists. There follows a list of the top 40 names in Chile. The 8 marked with an asterisk do not occur at all in Quiroga.

- | | |
|-----------------|----------------|
| 1. González. | 21. Alvarez. |
| 2. Silva. | 22. Gómez. |
| 3. Pérez. | 23. Sánchez. |
| 4. Rojas. | 24. Vázquez. |
| 5. Díaz. | 25. Gutiérrez. |
| 6. Ramírez. | 26. Reyes. |
| 7. Valenzuela.* | 27. Soto. |
| 8. Muñoz. | 28. Ortiz. |
| 9. García. | 29. Contreras. |
| 10. Rodríguez. | 30. Morales. |
| 11. Martínez. | 31. Espinoza. |
| 12. Fernández. | 32. Ahumada.* |
| 13. Vargas. | 33. Escobar.* |
| 14. López. | 34. Núñez.* |
| 15. Herrera. | 35. Carrasco.* |
| 16. Castro. | 36. Figueroa.* |
| 17. Bravo.* | 37. Jiménez. |
| 18. Guzmán. | 38. Romero. |
| 19. Molina. | 39. Jara.* |
| 20. León. | 40. Olivares. |

TYPES OF SURNAMES

Before we can consider the ethnic connotations of family names in Quiroga we must consider methods of formation and types of surnames. The oldest form of surname, apparently, is the true patronymic which was formed in the Iberian Peninsula by adding -az, -ez, -iz, oz, -uz, -s, -as, -es, and -is to some form of the father's Christian or baptismal name. In this manner we have López (son of Lope), Sánchez (son of Sancho), González (son of Gonzalo), etc. The above-listed terminations originally had regional and dialectic significance, but the Christian reconquest of the Peninsula from the Moslems, and considerable migration from other parts of Iberia into southern Spain, together with the lack of a standardized orthography, make it extremely hazardous to assign specific provincial origins to the names with various endings. However, in general, the endings in "s" instead of "z" come from western Iberia. There are said to exist more than 200 of these patronymics, of which some 40 are to be found in Quiroga. Somewhat more than a quarter of the inhabitants of Quiroga have surnames of this type.

An ancient and patrician form was derived from the estate of domains of a noble or landholder. These estate names (*apellido señorial y solariego*) were formed by following the baptismal name with "de" (of) and the name of the possession, as in

Juan de Talavera (Thayer Ojeda, 1917, 1919).² In time common people with no lands approximated the seignorial names by taking as surnames the names of the places where they were born or where they had their homes. In this fashion a certain Juan born in Talavera might be Juan Talavera or Juan de Talavera also. The presence of the "de" does not indicate noble ancestry necessarily, but the absence usually denotes a plebian origin. No family in Quiroga uses the "de" by itself or in any combination. Formerly there was the name "Ponce de León." There are many of these place-surnames (*nombres lugareños*) in Quiroga, such as Aguilar, Arriaga, Ayala, Heredia, León, Medina, Mendoza, Mejía, Miranda, Morán, Pantoja, Rocha, Toledo, Trujillo, Zamora, and Zaragoza. Of the same general type are names derived from such natural and cultural features as caves, rocks, streams, hills, plants, castles, settlements, forts, etc. Among such names in Quiroga are: Arroyo, Barrera, Campos, Castañeda, Castillo, Castro, Corral, Cuevas, Estrada, Fuentes, Fuerte, Fraga, Granados, Huerta, Mesa, Molina, Morales, Olivares, Ortega, Peña, Pineda, Ríos, Rivera, Robles, Rosales, Sierra, Soto, Torres, Tovar, Vega, Vargas, and Villa. The various place-surnames are not very helpful in determining origins, since individuals with, for example, Basque names such as Arriaga and Ayala may be descendants of individuals who came over to New Spain from Andalucía, and whose ancestors for several hundreds of years had lived in New Castille. Owing to local intermarriage in southern and central Spain there may be very little Basque left excepting the name. About all that can be presumed is that the male ancestry ultimately was from one or another of the Spanish provinces. A third important group of surnames includes those derived from nicknames pertaining to physical and moral qualities, and names from professions, occupations, or other comparable items. In this heterogeneous group fall such names as Caballero, Cortés, Farfán, Gallardo, Guerrero, Herrera, Leal, Márquez, Pulido, and Salmerón. Also there might be included objective names of uncertain original application such as Barriga (belly), Calderón (cauldron), Corona (crown), Flores (flowers), Luna (moon), etc.

Of the various other types of surnames there is one more which is important for the Quiroga area. This is the type composed of baptismal names, and of the full saint's name as in Santa María and Santana. In general, old Christian families in Spain did not have or take such names. They were usually assumed by Jews and Moslems converted to Christianity. Examples of such names in Quiroga are Aparicio, Baltazar, Bernal, Casimiro, Cruz, Fabián, Paz, Reyes, Román, Santillan, and Santoyo, all of which names are to be found among the sixteenth-century Spanish colonizers of Mexico (Bermúdez Plata 1940-46; Icaza, 1923; O'Gorman, 1945). However, the same process took place on the conversion of the Indians that had occurred with the Jews and Moslems in Spain. Hence, many of these Christian surnames may go back to pure Indians who assumed them in the sixteenth century. We have further assurance of this from an examination of the surnames in the neighboring Tarascan Indian towns of Santa Fe, San Jerónimo, and San Andrés. In these dependencies of Quiroga there must be at least 60 Christian surnames represented, among which the most common appear to be such as Fabián, Bautista, Dimas, Gabriel, Lucas, Gaspar, Alonzo, Baltazar, Mateo, Marcos, Trinidad, Cruz, Angel, Antonio, Sebastián, Jerónimo, Santos, Ignacio, Floreano, Salvador, Santana, Manuel, Aparicio, Valentín, Reyes, Patricio, Luciano, Cornelio, Jacinto, Dionicio, Simón, Santiago, Maximiano, Pablo, Bartolo, Andrés, Basilio, Agustín, Dolores, Francisco, Lázaro, Timoteo, and Bruno. Of such names, in addition to the 11 mentioned earlier, there are in Quiroga, Conrado, Estela, Floriano, Magos, Sixtos, and Trinidad. In the 1860's there also were Carlos, Amador, Gil, Guido, Guadalupe, Jaimes, Lázaro, Mateo, Marcos, Pio, Plascencio, Quirino, Ramón, Santacruz, and Ventura. An examination of the records (Bermudez Plata, 1940-46; Icaza, 1923; O'Gorman, 1945) shows that there was a sprinkling of many different Christian surnames among the sixteenth-century immigrants to Mexico, but only Alonso, Bernal, Gil, and especially Martín, were present in significant numbers. Probably we will not be very wrong if we assume that all Quiroga families with Christian surnames (excepting the Bernal) are descended in the male line from pure Indians in the sixteenth century or probably later. These 16 families comprise 99

² In addition to the works by Thayer Ojeda, for discussion of Spanish surnames, see Godoy Alcantara, 1871; Ríos y Ríos, 1871; and Gosnell, 1938.

persons. Since none of these families, excepting some of the Aparicio, Cruz, Magos, and Sixtos, are found in the ranchos, our assumption is further strengthened. We have shown elsewhere that the ranchos have the least Indian blood of the various communities in the Quiroga area.

ETHNIC ORIGINS

A survey of the 252 Quiroga surnames shows that the great majority are Spanish in form and origin. Possibly five names are ultimately western Iberian (from Portugal and Galicia)—Acosta, Ambriz, Ferreyra, Lugo, and Mejía. Four names are of Arabic origin (Alcaraz, Alfaro, Farfán, and Medina), but all except Farfán are Spanish place names and probably do not indicate Moorish blood. Perhaps 14 names are Basque or Navarrese in origin (Amaya, Arredondo, Arriaga, Ayala, Durán, Elizondo, Fraga, Garnica, Landa, Miranda, Uribe, Urquieta, Urueta, and Zavala), and these represent 126 persons. There is 1 Italian family—Vercellino. Seven are possibly or definitely Spanish, but no information was located concerning their origins—Bucio or Busio, Ceja or Seja, Cendejas or Zendejas, Esqueda, Garria, Marínez, and Nárez. There remain 9 family names which probably or definitely are American Indian in origin. Tarascan forms are Anita, Cacarí or Cacaré, Cuín, Huape, Huacuz, Nambo, and Tzintzún; while Chagolla and Mexicano probably are Mexicano (Nahuatl).

INDIAN SURNAMES

It is interesting to speculate as to how Quiroga, which was pure Indian during the sixteenth century, and which is now essentially mestizo, received the various European surnames, and why and how some Indian family names survived. We know that the missionaries gave a Christian name to every individual baptized. Quite often such an individual would be known to the Spaniards only as, for example, "Juan, Indio" (John, an Indian). In the parish registry his son would be inscribed as, perhaps, "Francisco, hijo de Juan y María, indígenas" (Francis, son of John and Mary, Indians). If the need for a surname arose this boy might call himself Francisco Juan. Some of the adult Indians, when baptized, had Spaniards as godfathers; and often they would take the name of the godfather as their European surname—thus becoming Gómez or Martínez or

Infante without benefit of European blood. Apparently some of the Indians took the surname of their *encomendero* or master, much as did some of the Negro slaves in the United States. However, many of the Indians took or retained an Indian surname. We know very little about the name customs of the Tarascan Indians at the time of the conquest, and most of what we know is derived from the fragmentary and garbled material incorporated in the *Relación de Michoacán* (1903). This *Relación* was written about 1539 by an anonymous Franciscan friar. Both within the same edition and between the two published editions of this work there is great variability in the spelling of proper names. Consequently, it is almost impossible to analyze the some 60 or 70 personal names of Tarascan Indians presented, and to determine roots, meanings, and possible prefixes or suffixes of relationship. Perhaps there was nothing comparable with our family names; but there are indications that clan or sib names were used by some individuals in addition to some type of a given or personal name. From the *Relación de Michoacán* (1903, pp. 61, 69, 134, 289, 321, etc.) we learn that Curicaveri, the god of the Chichimec-Tarascons, was the ancestor of the ruling families with the *apellido* (surname) of Eneani, Zacapuhetlin, and Uanacasin (the spelling of each of these names varies greatly from page to page). Also, we learn that the ruler or *cazonci* was the representative on earth of Curicaveri, and that the *señores* (lords) of his lineage were the Huacuz-echa or eagle-clan. Actually, the term *huacuz* or *huacús* is applied to an *aguililla* or hawk of the *Buteo* genus. The name Huacuz is still one of the most common Tarascan surnames in the Pátzcuaro Basin, especially in Santa Fe. Apparently most or all of the members of the ruling class were members of the three families mentioned above, but those "surnames" were not used as such in the *Relación*. Possibly all of the names mentioned in the *Relación* were given names, occasionally linked with a nickname as in the case of the last *cazonci*—Tangaxoan Zincicha, who was baptized Francisco. His sons and grandsons took the surname of Huitziméngari, as in Don Antonio Gitziméngari who was *regidor* of Pátzcuaro when a charter was given the Indians of what is now Quiroga in 1534, and his son Don Constantino Huiziméngari who was governor of Pátzcuaro in 1589. Our assumption that names

cited in the *Relación* were given names is strengthened when we discover that a ruler of Tarianan or Mechucacán (modern Tzintzuntzan) was Zinzuni, which means hummingbird. This name bears no apparent relationship to those of other lords in the area although presumably all were related. It is of interest to note that Zinzún (Tzintzún, Cincún, etc.) is one of the four most common Indian surnames in the Pátzcuaro area today. We should mention here that Boturini (1746) lists among the manuscripts that he collected in Mexico in the eighteenth century a "Lista de las familias que hubo entre los Indios Tarascos, y los tributos que pagaban a sus casiques," but this appears to be lost.

Since many of the surviving Tarascan surnames are names of items in nature (especially of birds, but including other animals, plants, rocks, etc.), the existence of a totemic system may be indicated. However, the matter is very doubtful. Such names might well represent nicknames or given first names that were transformed into surnames under European influence. We must remember that in English we have such family names as Hawk, Fox, Flower, Apple, Rose, Hawthorne, Sparrow, Bean, Bear, Bird, etc., and with no implication of a totemic origin or connection. Also, names of occupations and status are encountered, such as Achá (a lord or ruler) which is still found in the Sierra Tarascan villages, Anita (derived from Anitani, one who combs or cleans cotton and wool) which is quite common in the Quiroga area, and Cacarí (a stone cutter) which is present in Quiroga. This may mean that the Tarascans had or were developing the occupational type of name which has given us so many names, such as Smith, Taylor, Bishop, Lord, etc.

Supplementary material can be obtained from the colonial documents housed in the Archivo General de la Nación in Mexico City, especially in the divisions on Indians, Lands, and Congregations. A survey of the first four volumes of the *Ramo de Indias*, which cover the later part of the sixteenth century, shows that in the Tarascan villages more than half of the names cited were a combination of Christian first name and Tarascan surname, as in Angel Tzintzún of Capácuaro, Juan Coneti of Cherán, and Francisco Cuini of Tupátaro. In second place,

with perhaps a third of the names, were combinations of two Christian names, as in Francisco Gabriel, Pedro Miguel, and Miguel Constantino. Finally, there was a sprinkling of common Spanish names, such as Lorenzo de Morales, Marcos García, and Pedro Hernández. All of the above-named individuals were pure Indians, since any mestizos or Spaniards were classified as such.

For Quiroga itself we have the collection of documents, beginning in 1534, which constitute the titles of the Indian pueblo of Cocupao and the adjacent congregated pueblos of Sanambo and Zirandangacho. In 1603 there was presented a list of the Indians of Zirandangacho-Sanambo who were settled on lands just south of present-day Quiroga. Among the 25 families mentioned, all had Indian surnames excepting possibly 3—Cantor, Abrero, and Cachas. The others included 4 Cuirís, 3 Tzitzique or Tzintziqui, 2 Petacuas, and a scattering of such extant names as Anitani, Tzintzún, and Guacús or Huacuz. In 1603 we find that lands bordering Quiroga were owned by Alonzo de Cáceres (given variously as Caserez, Cásares, Cázares, and Cazarez). In 1681–82 Indians of Quiroga had such names as Juan Guacasa, Juan Anita, Juan Cuirís, Juan Miguel, Sebastián Andrés, Pedro Melchor, and Juan de la Cruz. By 1714 we find the Indian officials of Quiroga with the names Diego Juan, Agustín Antonio, Nicolás Martín, José Guzmán, and Miguel de Cáceres. One mestizo citizen of the pueblo is mentioned, Juan de Mendoza; and the lands to the south and east belonged to Francisco Javier de Silva and Manuel Ponce de León. The latter person, either a Spaniard or a mestizo, and a citizen of Pátzcuaro, and his family held (and had held since about 1622) all of the lands that now comprise the rancho of Atzimbo, and perhaps Caríngaro, Icuácato, and Sanambo. Among the known relatives of the Ponce de León family, living in the area, were individuals with such family names as Díaz, Barriga, Tovar, Díaz Barriga, and Rueda. It is noteworthy that today the Ponce family is well represented in the ranchos and in Quiroga proper, as is true for the Tovar family to a lesser extent; while the Barriga, Díaz, and Díaz Barriga families have their greatest representation in the ranchos, and the Barriga, in first place, are as numerous as the next two families together in the ranchos.

SECULAR NAME CHANGES

From the fragmentary material available it appears that during the sixteenth century Quiroga was made up entirely of Indians whose names were predominantly Tarascan. By the end of the seventeenth century Christian surnames vied with Tarascan family names, but the community apparently was still all Indian. During the eighteenth century Spanish surnames appeared, and mestizos (and perhaps whites) constituted some portion of the population. During this same century negroids also formed a part of the population. Probably the mestizos and negroids came into the community by the same processes; i. e., by marriage with Indian women, and by setting up as tradesmen and craftsmen. Apparently there were three common sources for these extraneous elements. Valladolid (modern Morelia) and Pátzcuaro were the two nearest and largest centers of white, mestizo, and negroid population in Michoacán. And just to the east and south was the great maize-growing and cattle-raising hacienda whose northern portion is now occupied by the ranchos of Atzimbo, Caríngaro, Icuácato, and Sanambo. Probably the resident laboring population and illegitimate sons of the landlords contributed most directly to Quiroga.

Two sources give us imperfect statistics on race status in Quiroga during the eighteenth century. In 1742 Jose Antonio de Villaseñor y Sánchez, cosmographer for New Spain, carried out a rough census of families, which was published in 1746 (Villaseñor y Sanchez, 1746-48). In discussing the partido of Zinzuntza (Tzintzuntzan), Villaseñor states that the dependent pueblo of San Diego Cocupa contained 70 Indian families, 60 families of mestizos and mulattoes, and 30 families of Spaniards. Unfortunately we cannot determine the proportion of mestizos and of mulattoes, nor can we be certain that the so-called Spanish families were really white or merely mestizos culturally and socially advanced enough to be classified as "Españoles." There was little at that time in this small Indian village to attract pure whites.

Our second source is the parish register. Beginning in 1781 in Quiroga, separate baptismal books were kept for different races or castes.

One book was set aside for "Mulatos, Lobos, Negros y Moriscos," that is, for Negro-white and Negro-Indian castes, and Negroes. This book covered the years 1781 to 1831. In the Quiroga area, during the years mentioned, there were baptized two Negroes with the surname of Rincón. There were noted no lobos (offspring of an Indian and a Negro or mulatto), and no moriscos (offspring of a mestizo or white and a mulatto).³ Numerous mulatto children were baptized, with the following surnames:

Acosta.	Gaona.	Ortiz.
Alexandre.	García.	Palencia.
Almanza.	Guzmán.	Pérez.
Alvarado.	Hernández.	Piña.
Arciniega.	Hidalgo.	Pulido.
Ayala.	Hurtado.	Ramírez.
Borja.	Jacobo.	Rangel.
Cabrera.	Jiménez.	Redondo.
Calderón.	Juárez.	Reyes.
Campuzano	León.	Rincón.
Castañeda.	López.	Rodríguez.
Castillo.	Medina.	Sánchez.
Castor.	Méndez.	Santiago.
Chico.	Molina.	Santoyo.
Conejo.	Morales.	Serna.
Corona.	Muñoz.	Vidal.
Cuirís Ponce.	Navarro.	Zacapu.
Domingo.	Ochoa.	Zamorano
Escobar.	Olgún.	Zavala.
Espíndola.	Oliva.	

This marked presence of negroids in Quiroga, where none are now noted, brings up an interesting point. We know that at one period in colonial history there were more negroids than whites in Mexico. Also, it is known that Negroes and mulattoes often were used as overseers on the haciendas and elsewhere. Furthermore, any extensive examination of colonial records discloses that there were hundreds of communities in colonial Mexico where a large fraction of the population were negroids. This situation was not confined to the Veracruz and Guerrero coast lands of present concentration of visible Negro blood, but obtained from Chihuahua to Chiapas. There are a number of communities listed as being all mulatto in the eighteenth century whose populations now show little or no traces of Negro blood. On the other hand, a number of individual Negro

³ The terminology and percentages of white, Negro, and Indian blood involved in Mexican mixed castes during the colonial period is exceedingly complex and variable. The definitions given above approximate the most commonly accepted definitions of *lobo* and *morisco*.

physical characteristics appear in so-called mestizos in many parts of Mexico. This is especially noticeable in a certain dark skin coloration, flaring nostrils and flattened nose, and in a crinkly type of hair. Specifically for northern Michoacán, in the middle of the eighteenth century, important numbers of Negro and mulatto families are cited for such towns as Tacámbaro, Tzintzuntzan, Indaparapeo, Tarímbaro, Santa Clara, Uruapan, Huango, Chucándiro, Acuitzio, Angamacutiro, Charo, Maravatío, Taximaroa, Irímbo, Tuxpan, Zitácuaro, Talpujagua, Cuitzeo, Zamora, Sahuayo, Jacona, Peribán, Jiquilpan, Tlazazalca, La Piedad, Ecuandureo, Atacheo, Pátzcuaro, and Valladolid. It should be noted that the Sierra Tarascan villages had few or no negroid families. Apparently, in the Negro-white-Indian blend, the negroid characteristics tend to be obscured by those of the other two races, and now the presence of Negro blood normally is not noticeable. However, the writer believes that the great majority of so-called Mexican mestizos possess traces of Negro blood.

In this connection, it will be noted that the above list of mulatto surnames in the Quiroga area contains 33 family names which are still current; and also, that several Indian names are involved, such as Cuirís Ponce and Zacapu, and perhaps Alexandre, Conejo, Domingo, Jacobo, etc. The writer recalls some four or five individuals in Quiroga who showed possible negroid physical traits.

THE INDIAN ELEMENT

One book in the parish register was set apart for Indians alone. The earliest located covered the years 1788 to 1815. Unfortunately, lack of time prohibited our doing more than scanning a few pages. The family names ran the gamut from Tarascan, such as Anitan, Querenda, and Tzitziqui, to Spanish names, such as Barriga, Flores, León, Ontiveros, Peña, Rodríguez, and Valdovinos. A third book was for Españoles, Mestizos y Coyotes (Spaniards, mestizos, and offspring of Indian-mestizo unions). The earliest volume located for this group covered the years 1799 to 1822.

By the nineteenth century and the end of the Spanish colonial period, Quiroga had developed a surname pattern quite similar to that which obtains today. However, it was still considered

to be a predominantly Indian pueblo, as indicated in the magnificent report by Martínez de Lejarza (1824), where San Diego Cocupao is termed a village of Indians. During the remainder of the nineteenth century important changes took place. Tarascan ceased to be a live language in Quiroga. The lower part of town was taken over by the mestizos and whites; negroids ceased to be recognized as such; and the old República o Comunidad de Indígenas (Republic or Community of Natives; i. e., Indians) lost all of its lands and virtually ceased to exist. However, despite predominance of Spanish surnames, and in spite of the loss of communal lands and of their mother tongue, a majority of the inhabitants of the upper part of town (formerly the Barrio de San Miguel, and now commonly referred to as El Calvario) think of themselves as Indians, and are so considered by the other town inhabitants. Although physically nearly all of the people of El Calvario resemble mestizos, and are no more Indian than an equal or larger number of people in the lower town, they are set apart from and against the remainder of Quiroga in a number of ways (economy, education, local politics, religion, etc.) which are discussed in the sections of this report dealing with those matters.

Since the Madero Revolution, the agrarian *ejidal* program has revived or strengthened the feeling of apartness from the remainder of the town. The details of this program are discussed in the section on Land Ownership. This program revived the legally extinct Comunidad de Indígenas. The heads of families who considered themselves and were considered to be of the local Indian stock were granted an agrarian *ejido*. Practically all of these *ejidatarios* live in El Calvario; that is, in *cuarteles* II and III above the streets of El Cuerno and Manuel Doblado, and especially along the Calzada Ramón Corona. Furthermore, in January of 1946, of the 73 heads of family who are members of the Comunidad Indígena del Calvario, all but five participate in the agrarian program and are *ejidatarios*.

EL CALVARIO RESIDENTS

We have attempted to show the families that are considered now as Indian families in Quiroga. This attempt is demonstrated in the following list. The names are all of the surnames represented in

Names of El Calvario Residents

Anaya	--	1	4	López	12	--	3
5 Anita	20	--	4	1 Martínez	2	--	3
2 Avila	4	--	1	1 Medina	1	--	--
Baltazar	--	--	1	Mejía	5	--	--
Barriga	3	--	--	1 Mendoza	1	--	1
1 Bastida	2	--	--	4 Mexicano	15	--	3
Bedolla	1	--	--	2 Meza	6	--	2
Bermúdez	1	--	--	Milián	--	--	1
Calderón	--	--	1	Morales	--	--	1
Carillo	1	--	--	Nárez	1	--	--
Castillo	1	--	--	Olayo	1	--	--
Castro	1	--	1	Ortiz	1	--	1
3 Cázarez	16	--	--	1 Pacheco	1	--	--
1 Cervantes	5	--	--	Páiz	1	--	--
1 Coria	7	--	--	2 Pantoja	3	--	--
Coronado	1	--	--	1 Paz	5	--	--
Cruz	1	--	--	1 Pedroza	1	--	1
1 Cuín	3	--	--	9 Peña	31	--	12
1 Chávez	2	--	--	Peñaloza	1	--	--
2 Chagolla	10	--	3	1 Pérez	2	--	--
Delgado	1	--	--	1 Quintana	7	--	1
Durán	1	--	--	2 Rangel	11	--	2
Espinoza	--	--	1	1 Rendón	2	--	--
Esqueda	--	--	1	1 Reynosa	1	--	--
2 Estrada	13	--	3	1 Rivera	2	--	1
1 Fabián	6	--	1	1 Robles	1	--	--
Farías	--	--	1	1 Rodríguez	2	--	1
1 Fernández	5	--	--	1 Rosales	1	--	--
6 Flores	21	--	9	Ruiz	--	--	2
Fuentes	3	--	--	1 Salazar	2	--	--
1 García	6	--	1	4 Salmerón	18	--	6
1 González	9	--	1	1 Sánchez	3	--	--
2 Gutiérrez	2	--	--	Sixtos	--	--	1
2 Guzmán	10	--	2	Soto	--	--	1
Hernández	2	--	2	Torres	1	--	1
2 Herrera	6	--	1	12 Valdovinos	47	--	14
Huacuz	--	--	1	Vallejo	1	--	4
Huerta	1	--	1	3 Vázquez	9	--	--
1 Juárez	3	--	1	2 Villa	9	--	--
1 Lara	1	--	--	1 Villanueva	3	--	1

the part of Quiroga known as El Calvario, according to the census of 1940; i. e., blocks 5, 6, and 7 of *cuartel* II and blocks 3 and 4 of *cuartel* III. Some of these families are intrusive, and many family names are represented only by maiden names of married women. A few members of the Comunidad Indígena reside in other parts of town, but they possess surnames represented in the list. The numbers to the left of the names indicate the number of heads of family. If no number is given, as in the case of Barriga, it means that either the male line has become extinct, or else the possessors are "non-Indian" women who have married into the community. The first

column of numbers to the right of the names shows the total number of individuals with those surnames. The second column to the right indicates the number of *ejidatarios* representative of the various families. The lack of a figure in this column indicates either that the male line is extinct, or that no one of that name is considered to be a member of the Indian community. The exceptions are the five heads of family mentioned above, and their names are not certainly known to us. The names and figures for the *ejidatarios* are not strictly comparable with the material from the 1940 census, since they represent all individuals who have had *ejidal* rights during the period 1929 to 1944. During that span of time the number of *ejidatarios* has varied between 36 and 85 in any 1 year. Where a surname has no figures immediately to the right or left it indicates a family whose male line has become extinct in the community some time since 1929. A discrepancy in the number of heads of family indicates death of an adult, or marriage and coming of age of a minor male.

It will be noted that of the 80 surnames represented in El Calvario, 43 are or have been represented among the *ejidatarios*. And of these 43 family names some 25 are still represented in the male line. However, only a few of the names are distinctively Indian: Anita, Chagolla, Huacuz, and Mexicano, as well as probably Baltazar, Fabián, and Sixtos. The Cuín family, which is definitely Tarascan, probably is intrusive from neighboring Santa Fe, and thus would not be eligible for membership in the Comunidad Indígena del Calvario. However, it may be 1 of the 5 families which have refused to participate in the agrarian program.

INDIAN SURNAMES IN THE QUIROGA AREA

We have listed previously the nine Indian names still represented in Quiroga. Those not in the agrarian community, in addition to Cuín, are Cacari, Huape, Nambo, and Tzintzún. The assumption that these families represent intrusions from the Tarascan villages in the neighborhood is based on the results of a survey of the more common Indian surnames in the region. On the basis of births, marriages, and deaths recorded from 1919 to 1945, the leading Indian names in various

communities, arranged according to approximate frequency of mention, are:

<i>Tzintzuntzan</i>	<i>Santa Fe—Con.</i>	<i>San Andrés</i>
Seras.	Cuirís.	Cuanás
Zira, Cira.	Mayapeti.	Ziróndaro.
Picho, Pichu.	Seja, Ceja.	Oloqui.
Cuiriz.	Nambo.	<i>Quiroga</i>
Chichipan.	Cuñ.	
Huipe.		Chagolla.
Zacapu.	<i>San Jerónimo</i>	Anita.
Cuñ.		Mexicano.
	Huapeo.	Cuñ.
<i>Santa Fe</i>	Zinzún.	Huacuz.
	Picho.	Cuirís.
Huacuz.	Cuanás.	Tzintzún.
Tzintzún.		Nambo.

Disregarding Chagolla and Anita, which are quite unimportant outside of Quiroga, the over-all frequency is about as follows:

Huacuz, Huacús, Guacuz, etc.	A small eagle or large hawk.
Cuanás, Cuanaz, etc.	A frog.
Tzintzún, Zinzún, Sinsún, etc.	A hummingbird.
Cuirís, Cuiriz, etc.	A waterfowl of the duck family.
Seja, Ceja	Possibly not Indian in origin.
Zira, ¹ Cira, Sira	Possibly not Tarascan.
Mexicano, Mexicana, Meji-cano.	A Mexican Indian.
Cuñ, Cuini	Any small bird.
Huapeo, Huape, perhaps Huipe. ¹	Meaning uncertain.
Oloqui	Meaning not known to us.
Chichipan ¹	Probably a Mexicano name.
Mayapeti, Mayapiti, etc.	Something to do with a market.
Picho, ¹ Pichu	Meaning uncertain.
Nambo	Meaning unknown to us.
Ziróndaro	A marsh or swampy place.
Seras	Possibly not Indian in origin.
Zacapo, Zacapu, etc.	A stone.
Cacarí, Cacaré	Stonecutter or mason.
Such names as Cuate, Xochicalli (both of Mexican origin), Hisetzen, Huacapu, Hucuja, Huacuja, Huetzen, etc.	

¹ The interested reader will note some discrepancies between a number of the meanings we have listed and those given on page 233 of Foster's monograph on Tzintzuntzan. The names concerning which we do not agree are: Huipe, Zira, Picho, and Chichipan. Dr. Foster utilized etymologies provided by Pablo Velásquez, a native of Charapan in the Sierra. Our etymologies were derived from José Corona Núñez' knowledge of Tarascan language and literature, several Tarascan-Spanish dictionaries, and information locally provided. Since the Tarascan language has altered somewhat since the sixteenth century, and since the Sierra and Lake dialects differ considerably in some elements of the vocabulary, it is not possible to be absolutely certain concerning all Tarascan or supposedly Tarascan words. The reader is at liberty to accept either or reject both etymologies.

It is of interest to note that names of positive or probable Mexicano (Nahuatl) Indian origin are practically restricted to the areas of strongest Spanish and Mexican colonial settlement, namely, Tzintzuntzan and Quiroga. The names assumed to be Mexican in origin, and the possessors to be descendants of Mexican Indians, are Chagolla, Chichipan, Cuate, Mexicano, and Xochicalli.

There is yet one more source which gives us some idea concerning the ethnic composition of Quiroga. This is the civil register. During the years 1873 to 1885 it was customary to indicate nationality and race; and, with reference to those of Mexican nationality, to distinguish "Mexicano indígena" (Indian) from "Mexicano no indígena" (non-Indian Mexican). A survey of the year 1873 shows that some or all of the individuals with the following surnames were considered to be Indians: Abrego, Alvarado, Ambris, Anitan, Aparicio, Banderas, Bautista, Bonifacio, Cabrera, Chávez, Coronado, Díaz, Estrada, Fabela, Fabián, Flores, Frutos, González, Guitérrez, Heredia, Hernández, Juárez, López, Martínez, Mateo, Marcos, Mejía, Mejiicano, Negrón, Olayo, Ontiveros, Peña, Pio, Ramos, Rangel, Ramírez, Román, Roque, Salmerón, Sánchez, Saucedo, Silva, Valdivia, Valdés, Valdovinos, Vázquez, and Zavala.

ETHNIC DISTRICTS

The leading Indian families of Quiroga at present are the Valdovinos, Peña, Flores, Anita, Salmerón, Mexicano, Estrada, López, Rangel, Chagolla, and Guzmán. Approximately one-half or more of the members of the first six families mentioned live in the Calvario district. Just as certain family names are predominant in the Indian element, and have a regional concentration in the recognized Indian district of El Calvario, there are certain other family names with circumscribed distribution and with ethnic connotations. In this connection one can make a tripart division of the Quiroga region. The Calvario is predominantly Indian, with secondary concentrations of Indian families in adjacent portions of *cuarteles* II and III, and in *cuartel* I which contained the old colonial Indian hospital and also comprises lands which were acquired from Santa Fe some 80 years ago. The heart of Quiroga, comprising parts of all four *cuarteles* and most of the stores

and the leading plazas, is dominated by mestizo and white families. This mestizo-white district also embraces all of *cuartel* IV and the eastern district known as the Pueblo Nuevo. Just as Indian Quiroga can be thought of as occupying the northern and western portions, so the mestizo-white zone can be said to comprise the remaining central and southern and eastern portions which contain the exits of roads leading to Morelia and Pátzcuaro and which border on the lands of the former hacienda of Atzimbo. The ranchos derived from the former hacienda (Atzimbo, Caríngaro, Icuácato, and Sanambo) make up a third recognizable division which is dominated by families of mestizo origin. There has been much intermarriage between individuals from the ranchos and from the mestizo-white division of Quiroga, and a number of essentially rancho families have become established in Quiroga during the past 80 years. On the other hand, there apparently has been very little movement from Quiroga out to the aforementioned ranchos. The remaining two ranchos can be considered appendages of two of the ethnic districts—La Tirimicua is Indian and mestizo and properly can be tied in with the Calvario district to which it is adjacent, and Zirandangacho is but an outpost of mestizo-white Quiroga with which it is connected.

The four mestizo ranchos presumably contain the descendants of the former hacienda laborers, who have acquired title to the lands of the extinct hacienda. It is known that the inhabitants are a mixture of white, Indian, and Negro, so amalgamated that the present product can best be referred to as mestizo. An aberrant element is the conspicuous presence of some gray and blue-eyed individuals, often with red or fair hair, and commonly with light or florid complexions. This is especially true of some past and present inhabitants of Atzimbo. It has been suggested that this white element is derived from the presence of French and Belgian troops in the area during the French Intervention in the 1860's. Characteristic rancho surnames are such as Barriga, Herrera, Chávez, Campuzano, Ruiz, Díaz and Díaz Barriga, and Aguilar, which are the most numerous families in the ranchos and over half of whose representatives in the Quiroga region are to be found in these ranchos. Among other families, all or more than half of whose members live in the ranchos, are the Arriaga, Magos, Milián,

Olayo, Ortiz, Pineda, Ramírez, and Sierra. It is noteworthy that the leading Indian family names, such as Anita, Estrada, Fabián, Flores, Mexicano, Peña, Salmerón, and Valdovinos, are not represented in the ranchos, not even in the maiden name of a married woman. Also, such family names as Chagolla, Guzmán, López, and Rangel, which are well represented in the Indian families, have but a slight representation in the ranchos. In connection with the local concentrations of certain surnames in the ranchos or among the so-called Indians, we should consider the results of a survey of all surnames listed for sixteenth-century Spanish conquerors, colonizers, *vecinos*, *encomenderos*, *corregidores*, and the like, in New Spain. We failed to find for sixteenth-century Michoacán and its borderlands (Jalisco, Colima, Guanajuato, etc.) 75 of the 252 family names listed in the 1940 census. Thirty-one of these 75 surnames were represented in 1940 by 5 or more persons, and the most important among these were (in the order of their importance in the Quiroga region): (1) Barriga 219, (9) Campuzano 72, (14) Valdovinos 64, (23) Chagolla 48, (28) Anita 41, (36) Farías 32 (unless this name is derived from Frias), (44) Magos 25, (46) Sierra 25, (47) Olayo 24, (51) Servín 21, (54) Saucedo 20, (56) Sixtos 19, (58) Mexicano 18, (64) Villa 16, (65) Castro 14, and (68) Reyes 14. Our conclusion is that the families having such names were either Indians or else comparative latecomers.

The determination of the white or practically white population of Quiroga is quite difficult. No anthropometric study was carried out, or ever has been done, in Quiroga. Furthermore, physical anthropologic study alone, without support from genealogic records, is never sufficient. An individual may appear to be completely white in physical racial characteristics and yet he may have one or more known ancestors who were nonwhites. It is possible that, with the exception of the Italian family, there are no absolutely pure whites in the Quiroga area. On the other hand, there are a number of families with prestige and comparative wealth and education, many or all of whose representatives physically could be classed as whites. From a study of the municipal records, tax rolls, histories of Michoacán, and other sources, we have compiled a list of all the families whose members have dominated the political, economic, and social life of Quiroga during the past one hundred and

more years. These families, in alphabetic order, are: Alcaraz, Arellano, Arias, Ayala, Barriga, Calderón, Campuzano, Castañeda, Castro, Cázarez, Chagolla, Cuiriz, Domínguez, Elizarraras, Elizondo, Farías, Fuentes, Gaona, García, Gonzaga, Gutiérrez, Guzmán, Huerta, Lara, Leal, León, López, Magaña, Medina, Mendoza, Mier, Ortega, Ortiz, Padilla, Pantoja, Ponce, Robles, Rodríguez, Rojas, Sendejas, Serranía, Silva, Tellez, Tena, Torres, Tovar, Valdés, Villanueva, Villaseñor, Villicaña, and Zamudio. All of the prefectorial and municipal elective and appointive positions from 1862 to the period of agrarian dissensions in the early 1930's were held by members of these families. The bulk of the property and nearly all of the larger businesses are in the hands of these families. Only individuals from some of these families have made a name for themselves in other parts of Mexico. However, some of these families are now extinct in Quiroga; other families had their period of glory and power in the middle or latter part of the nineteenth century; and some of the families are distinctly recent in their rise to social and economic position. Among the 50-some families listed there are families of presumptive Indian origin, and a larger number are definitely mestizo racially. Nevertheless, there are a few families whose surnames have not appeared in the records as belonging to known Indian, mu-

latto, or mestizo families. These names will not be listed since such families are no more certain to be pure white than are many individuals who have a family name in common with Indians, mulattoes, or mestizos. It must be kept in mind, considering the various methods by which European family names were acquired by nonwhites and mixed-breeds, that all the individuals with the same family name in the Quiroga area are not necessarily related. In fact, quite the contrary is true for many family names. The only safe assumption is that, in general (considering the marked social and economic privileges which set the whites above the mestizos, and the mestizos above the Indians, during all of the colonial period and well into the period of Independence), accumulated wealth and opportunity have tended to maintain the whites and near-whites in the upper privileged class. This condition has been upset somewhat by revolutions, especially the last revolution, but the generalization probably still holds for Quiroga and for many other communities in Mexico.

Our conclusion, from the study of family names, history, and the appearance of the inhabitants, is that the population of Quiroga is essentially mestizo. There are individuals who are pure Indians or nearly so, and there are persons who are whites or practically so, but they constitute a decided minority.

GOVERNMENT

At the present time the name "Quiroga" is applied to three progressively larger political entities. The smallest is the community proper of Quiroga which has the official category or rank of *villa*, which is best translated as "town" in English. The urban community of Quiroga dominates and claims as its traditional lands a surrounding rural area in which there are six small communities known as ranchos. This area constitutes Quiroga in general, as contrasted with the town proper. Finally there is the *municipio* of Quiroga, which includes the general Quiroga area and three distinct pueblos or villages with their surrounding lands. This *municipio* is not a municipality in the ordinary American sense; rather, it is more like a township of the northern and eastern United States which may contain a number of settlements or villages. The *municipio* is constitutionally the basic political element of the Mexican States.

HISTORICAL BACKGROUND

Before we discuss the government and external relationships of the *municipio* of Quiroga, we will present a brief history of the development of governmental units in the Quiroga area and Michoacán from earliest colonial times to the present. This is given for background, and also because it is nowhere else available either in Spanish or in English.

The independent "kingdom" or state of the Tarascans (which covered more than the present State of Michoacán; see Brand, 1944) was conquered by a lieutenant of Cortez in 1522. The Tarascan capital was at Tzintzuntzan, and this city included or claimed as dependent *barrios* all the villages of the Pátzcuaro Lake Basin as well as some outside of the basin. Cortez held Tzintzuntzan and its *barrios* (which undoubtedly included Cocupao or Quiroga) as an *encomienda* from

1522 until 1527/29. A *mayordomo* represented Cortez in Tzintzuntzan and collected the tribute from the Indians. When Cortez entered a period of disgrace the members of the first *audiencia* (1528–31) seized these lands, and entered the tribute in the name of the crown (*Corona de S. M.*). The representation of royal administration and justice was in the hands of temporary *alcaldes mayores* (high constables) and *corregidores* (overseers or magistrates), with seat in Tzintzuntzan (also known as Uchichila and Michoacán) from about 1528 to 1540. The records are scanty and contradictory as to administration during this period.

In 1543 Mexico had been divided on paper into four provinces, one of which was the Provincia de Michoacán. This province did not materialize as a political unit until 1787, but its area was occupied by the bishopric of Michoacán (1536–), and the term was used popularly for the entire region. One must keep in mind that until 1787 the various *alcaldías mayores* and *corregimientos* within the so-called province of Michoacán were dependent only on the audience and viceroy in Mexico City. The highest political and judicial unit was the *alcaldía mayor*. After the 1550's we no longer read of a *corregidor* in the Pátzcuaro area. We must assume that until the establishment of the intendency in 1787, Cocupao looked to Tzintzuntzan and Pátzcuaro for administration and justice. Despite much that has been written, it is evident (Díez de la Calle, 1646; Villaseñor, 1746–48; Beaumont, 1932) that from about 1540 until 1787 Pátzcuaro was the official capital of the restricted province or *alcaldía mayor* of Michoacán. When the seat of the bishop was shifted in 1540 from Tzintzuntzan to Pátzcuaro, the seat or capital of the *alcalde mayor* also shifted from the one *barrio* of the City of Michoacán to the other *barrio*, and his title remained *alcalde mayor* of Michoacán or of Uchichila-Pascaro (combining the names of the two places). In 1576 the principal administrative and judicial functions of the *alcaldía mayor* or *provincia* of Michoacán were removed to the Spanish *villa* of Valladolid (founded 1541) which became the de facto capital. The *alcalde mayor* now took the title of Michoacán alone, or Valladolid alone, but also it appeared as Huitzila-Pátzcuaro-Valladolid (from the three different cities known as Michoacán). The *alcalde mayor* usually resided in his de facto capital, but

he appointed a lieutenant (*teniente de alcalde mayor*) who represented him in the official and nominal capital of Pátzcuaro-Michoacán. At times the residences were reversed. The *alcaldía mayor* of Michoacán was divided into a number of areas or *partidos* among which was that of the former capital, Uchichila or Tzintzuntzan, within which was the Indian village of Cocupao. Apparently descendants of the last *cazonci* or ruler of the Tarascans held the position of governor in Tzintzuntzan and Pátzcuaro, and were over the appointed governors and elected *alcaldes* or judges in the surrounding Indian villages. The tribute or taxes paid by the Indians of Cocupao went to the representatives of the crown in Tzintzuntzan and Pátzcuaro until the period of Independence, excepting for the years 1539–54 when possibly they were included in the *encomienda* of Juan Infante. (See Land Settlement, pp. 10–11).

The entire framework of administration becomes clearer with the erection of the intendency of Valladolid in 1787. This intendency had legally defined boundaries (the first in the political history of Michoacán), and all the powers of *alcaldes mayores*, and *corregidores* (which were abolished in Mexico at this time, with a few exceptions) were placed in the hands of the intendent whose capital was Valladolid. The intendency was divided into 20 *departamentos* or *partidos* or *sub-prefecturas*, among which was that of Pátzcuaro which included Cocupao. What role Tzintzuntzan played between Cocupao and Pátzcuaro is uncertain. Cocupao continued to be an essentially Indian pueblo ruled by its governor, judges, and religious officials. This pueblo exercised control over the village lands, whose boundaries were a matter of almost constant conflict with the neighboring Indian communities of Tzintzuntzan and Sante Fe de la Laguna, and with the white and mestizo owners of haciendas.

With independence in 1821, the province of Valladolid soon was converted into the State of Michoacán (1824–25). After that it alternated in title between an *estado* of a federated republic and a *departamento* of a centralized republic or empire. Since 1867 Michoacán has been a “free and sovereign” federated state. With the acquisition of statehood Michoacán was divided (1822–24) into major divisions which went under the

names of *departamento*, *distrito*, and *prefectura* and varied in number between four and seven until they were finally abolished in 1868. These major divisions were headed by prefects, appointed by the governor, who were next to the top in the hierarchy of political government. From 1822 until 1846, Cocupao oscillated between the northern department and the southern department which had its seat in Pátzcuaro; and from 1847 until 1868 (excepting for two brief periods without departments) Cocupao was in the northern department with its *cabecera* in Morelia. The old *partidos* of colonial times were continued, with some changes, from 1822 to 1917. They commonly ran in number between 14 and 22, were known variously as *partidos*, *sub-prefecturas*, and *distritos*, and until 1868 and the abolition of the prefectures or departments were headed by subprefects appointed by the prefects. Between 1868 and 1917 these divisions were referred to as *distritos*, and they were headed by prefects appointed by the Governor of the State. From 1855 to 1868 Quiroga was apparently at the zenith of its political importance. Within this period from 1855 to 1861 and 1863 to 1868, the *partido* and *distrito* of Cocupao de Quiroga was headed by a prefect or subprefect, with headquarters in Quiroga, whose administrative area embraced the *municipios* of Quiroga and Tzintzuntzan. For the brief period 1861–63 the prefect in Quiroga ruled over a *distrito* which included the two above-mentioned municipalities and also those of Zacapu, Coeneo, and Huaniqueo to the west and north. Unfortunately, none of the prefectorial records for this period of greatest expansion of Quiroga have been located. During the longest period of records, 1868 to 1917, the prefect of the district of Morelia was the superior chief of Quiroga, excepting from April 28 to July 26, 1870, and again in 1875 when Quiroga was attached to Pátzcuaro.

The earliest known form of township or municipal government for Cocupao-Quiroga goes back to Indian and colonial times when Cocupao was a *barrio* or part of Tzintzuntzan-Michoacán. How long this situation obtained we do not know; but the proceedings of the 1603 congregation of Cocupao refer to one of the congregated pueblos (Sanambo) as subject to Tzintzuntzan. In addition to the general control exercised by the governor of Tzintzuntzan, the pueblo of Cocupao

possessed its own set of Indian administrative, judicial, and religious officers (*gobernador*, *alcaldes*, *prioste*). Since in colonial times ecclesiastic and civil units covered the same areas (theoretically), and since Cocupao was part of the parish of Tzintzuntzan throughout the colonial period, we may assume that Cocupao did not acquire independent municipal government until shortly after independence was gained from Spain. There are indications that between 1822 and 1825, apparently in 1823, the *municipio* of Cocupao with an independent council or *ayuntamiento* came into existence. According to the State constitutions, the State congress has always possessed the power to organize and eliminate *municipios*. During the more than 120 years of existence of the State of Michoacán the number of *municipios* has fluctuated between 61 and 102. One can trace the rise and fall of population, finances, and political philosophies in these changes (e. g., 1825–90; 1831–61; 1861–79; 1868–75; 1874–61; 1887–76; and 1941–102). Quiroga has been a *municipio* without break since the 1820's, and has possessed an *ayuntamiento* all of that time excepting during the years 1837–46.

The nuclear community of Quiroga first appears in the records in 1534 as the Indian pueblo of San Diego de Cocupao. Even by that early date it was referred to as a congregation, which implies that the populations of a number of earlier settlements had been brought together to constitute the pueblo. Probably this was done between 1531 and 1534 by either the inspector Juan de Villaseñor or the *audiencia* judge (*oidor*) Vasco de Quiroga, who tried to pacify the Indians and organize the province of Michoacán which Nuño de Guzmán had ravaged and disrupted in 1529–30. On the maps published by Beaumont and by Seler, which date presumably from about the middle of the sixteenth century, there are shown (in recognizable position and spelling) the communities of Santa Fe de la Laguna, Cocupao, Zirandangacho, Cutzaro, and Huarapo (arranged in approximate decreasing order of size). One of these (Zirandangacho) and two not shown (Sanambo and Santiago) were congregated in 1603 within the lands of modern Quiroga. Huarapo is now a scarcely visible ruin on top of a nearby hill, and the *barrio* of Cutzaro has been abandoned since the last revolution. According to the *Suma de Visitas* (Paso y Troncoso, 1905) (from about the middle of the sixteenth

century) Juan Infante held in *encomienda*, all of the island pueblos and those of the west shore of Lake Pátzcuaro, and also Purenecuaru (to be identified with modern San Jerónimo Purenchécuaru) and its dependencies Hazcuaro on a peninsula (San Andrés Ziróndaro), Serandanguacho (Zirandangacho) near the lake, Guanímalo (?) between Tzintzuntzan and Tiripitío, and Cuzaro (Cutzaro) near Santa Fe and in view of the lake. Santa Fe is not listed because that was a pueblo and hospital of Indians founded by the *oidor* Quiroga about 1534. Cocupao may possibly have been included in the above *encomienda*. Through court action Quiroga, after he had become bishop of Michoacán, proved that these and other communities were *barrios* of the City of Michoacán and Infante was forced to give them up in 1554. As mentioned previously, in 1603 three villages were congregated with Cocupao. After that date they no longer appear as villages or pueblos, and at a much later date Zirandangacho and Sanambo reappear as ranchos of Tzintzuntzan and of Quiroga respectively. In the meantime the Pueblo de San Diego de Cocupao continued as a pueblo and *república de Indios* until the Mexican Republic was formed, when the Indian element of Cocupao was reconstituted as a *comunidad de indígenas* holding its lands in common. By 1852 Cocupao was easily the largest and most important community in the northern portion of the lake basin, and consequently it was elevated to the rank of *villa*, with the surname of Quiroga, which rank it still possesses.

Here it should be mentioned that only the State congress has the power to decide the official name and rank of a community in Michoacán. In general, size and wealth of the population determine the position of a community (*población*, *lugar*, or pueblo in the broad sense) within the hierarchy of pueblo, *villa*, and *ciudad*. Surnames are derived commonly from historical events and notable persons. When Michoacán became a state there were the cities of Tzintzuntzan (a city only in name), Pátzcuaro, and Valladolid-Morelia, and the town of Zamora and possibly Charo. All other settlements were pueblos, haciendas, *minerales*, and other lower and functional classifications. By 1837 Zamora had become a city, and Puruándiro, Tacámbaro, Uruapan, and Zitácuaro were *villas*. The next advancement to town class within the State was that in 1852 of San Diego

de Cocupao, Villa de Quiroga. After that, especially 1858 to 1862, there were many promotions. We may logically assume from the above evidence that about a century ago Quiroga was the eighth or ninth most important place in Michoacán. It is claimed locally that the great liberal and martyr governor of Michoacán (Melchor Ocampo, who provided the state its surname in 1861) often met with his liberal associates in pleasant Cocupao to plan political and sociological reforms, and partly because of pleasant memories of "liberal" Cocupao he threw the weight of his governorship to support the advance in rank. Cocupao derived its surname from the great *oidor* and bishop Don Vasco de Quiroga. Although Quiroga may have made the first congregation of Cocupao, he is better known as the founder and defender of neighboring Santa Fe de la Laguna, which village was Cocupao's bitterest enemy throughout the colonial period. Ironically enough, in the title of 1534 Quiroga was enjoined from disturbing or taking lands away from Cocupao (" . . . y que no venga Señor Don Vasco de Quiroga a quitar las tierras a estos naturales de San Diego Cocupa"). Examples of other surnames in the region are: Pueblo de Coeneo to Villa de la Libertad in 1858, Villa de Uruapan to Ciudad del Progreso in 1858, Pueblo de Zacapu to Villa de Mier in 1859, Población de Tzintzuntzan to Ciudad Primitiva de Tzintzuntzan in 1861, Pueblo de Huaniqueo to Villa de Morelos in 1861, and Pueblo de Cuitzeo to Villa del Porvenir in 1861. Sometimes the entire earlier portions of the name became lost, as in the case of (San Diego Cocupao de) Quiroga, and Santa Clara de los Cobres (later Santa Clara de Portugal) which is now Villa Escalante. More often, the surname is used only officially, as in Zacapu de Mier and Coeneo de la Libertad.

The Municipio de Cocupao, according to the Martínez de Lejarza report (1824), originally contained the Pueblo de San Diego de Cocupao, the two dependent pueblos of San Jerónimo Purenchécuaru and San Andrés Ziróndaro, and four dependent haciendas and five dependent ranchos (not named). By 1831 (by legal record), and as early as the 1820's (from various implications), the Pueblo of Santa Fe de la Laguna was added to the group. This comprehension, which is essentially that of today, continued without change until May 7, 1874, when Tzintzuntzan and its dependencies were added to the *municipio*.

Practically all of the time from 1822 until 1874 the Municipio de Tzintzuntzan had embraced the pueblos of Ihuatzio and Cucuchucho and dependent haciendas and ranchos on the Gulf of Ihuatzio side of the peninsula of Tariácuri, but only Tzintzuntzan and associated communities just to the south and east of Quiroga were transferred in 1874. The remainder of the old Municipio de Tzintzuntzan was attached to Pátzcuaro until the *municipio* was reconstituted in 1930. Because Cocupao-Quiroga was a dependency of Tzintzuntzan in colonial times, and because northern Tzintzuntzan was a dependency of Quiroga during most of recent time (1874–1930), there is some uncertainty concerning the original (pre-1874) status of some of the dependent ranchos. Furthermore, there never has been a law or official demarcation of the exact boundaries of the *municipios* and their dependent *tenencias*. The national statistical code of 1889 required that every *municipio* possess in duplicate a map of its territorial extension, and also the measurements of all private properties, but no such map for Quiroga has been located. Also, the municipal records show that in 1895 a "Plano de la Villa de Quiroga," which had been requested by the Government in Morelia in 1892, was completed, but this also has been lost. Presumably the secretary of the municipal council of Quiroga made a rough sketch map of the extent of the *municipio* in 1945 which was sent to Morelia, but even that map could not be located in the governmental offices. Whenever the State government makes a change in the area of some political unit it does so by naming the communities affected, and the exact boundaries are left to local knowledge, tradition, and claims. Very seldom are there mutually agreed upon boundaries between *municipios* or between any two adjoining constituents of a *municipio*, and practically never will one find jointly accepted boundary markers or fences. Practically speaking, if a man owns property on a disputed boundary that property is considered to belong to the entity in which he resides and pays taxes. In just this fashion, because of changes in ownership of properties, the Villa de Quiroga and its *municipio* have advanced southward at the expense of Tzintzuntzan and the rancho of Patambicho. In the 1870's Tzintzuntzan claimed lands right up to the Calle Nacional exit from the Villa de Quiroga, but now the boundary is considered to be one or another

of two streams that flow into Lake Pátzcuaro near Patambicho.

The exact boundaries of Quiroga and its ranchos are discussed in the section on Land Settlement (pp. 23–25). Here we will give merely a listing of the relationships of these ranchos during the past century. Unfortunately we do not possess a list of the ranchos and haciendas prior to the 1860's. In 1869 El Tigre, Atzimbo, Zirandangacho, Patambicho, and Cuenembo belonged to Tzintzuntzan, while Icuácató, Sanambo, Caríngaro and La Tirímicua belonged to Quiroga. By 1910 Quiroga had acquired El Tigre, Atzimbo, Zirandangacho, and also Las Pilas (which lies east of Cuenembo). After the separation of Tzintzuntzan in 1930, Quiroga retained its original four ranchos (one had been "lost" since the five reported in 1822), and also Atzimbo and Zirandangacho (which may have been the fifth rancho of Martínez de Lejarza). Since the parish records indicate that Atzimbo and Zirandangacho were not part of the *curato* of Quiroga when it became independent of Tzintzuntzan in 1853, these two ranchos seem to be definite acquisitions of the past 100 years. In summary, it seems that the pueblos of Santa Fe, San Jerónimo, and San Andrés have been *tenencias* of Quiroga throughout the independent Mexican period, and that all the dependent ranchos (with the exception of Atzimbo and possibly Zirandangacho) have been a part of Quiroga since some date in the colonial period.

Two other types of jurisdiction have had areas that coincided fairly closely with those that we have just outlined. These are the judicial and the fiscal. Indian and ordinary *alcaldes* or judges carried out local judgment during the entire colonial period, and first appeal was made to the *alcalde mayor* or his lieutenant in Pátzcuaro. During the period of the intendency, with the abolition of the *alcaldía mayor*, appeal was to the senior or first *alcalde* in Pátzcuaro. After 1822 and until 1863 the *juez letrado de primera instancia* constituted the court of major jurisdiction and appeal in Pátzcuaro, to which cases were carried from the elected *alcaldes* or *jueces de paz* in Quiroga. After 1863 Quiroga turned to the judge of first appeal in Morelia, excepting for brief periods in 1867, 1870, and 1875. From 1868 until 1917 the areas of the political-economic *distritos* were the same as those of the judicial districts, and the number of the *juzgados de primera instancia* varied

between 15 and 17. Although the political-economic district was abolished in 1917, the judicial districts still obtain.

During the colonial period the Indian population of Quiroga paid their taxes in the form of assessed tribute to the representatives of the *encomenderos* and of the crown in Tzintzuntzan and Pátzcuaro. In 1824 Michoacán was divided into 10 taxation regions, 1 of which had headquarters in Pátzcuaro. In 1831 these head tax offices or *administraciones de rentas* were given the right to collect all forms of State taxes including excise taxes on tobaccos and other items covered by the *alcabala*. Under the head office were several branch offices known as *receptorías* or *cabeceras de secciones rentísticas*. By 1843 a *sección rentística* had been established which included all of the modern *municipios* of Quiroga and Tzintzuntzan, and which had its headquarters or *receptoría* in Cocupao-Quiroga. Such an arrangement has continued to the present with but few changes. For a brief period 1860–63 Quiroga was the seat of an *administración subalterna de rentas*, and in 1862–63 Quiroga constituted a *distrito rentístico*, during all of which period the area covered included the *municipios* of Quiroga, Tzintzuntzan, Coeneo, Zacapu, and Teremendo (=Huaniqueo?). At present the *receptoría* in Quiroga is the headquarters of the second taxation section within the Pátzcuaro tax district, and a *sub-receptoría* exists in Tzintzuntzan.

From the historical outline given above it is apparent that Quiroga has gradually developed from a small Indian community, dependent upon Tzintzuntzan and Pátzcuaro in nearly all matters of government, to a position of importance and comparative independence. Also, there has been a general trend away from Pátzcuaro and toward Morelia. Where formerly Quiroga was dependent upon Pátzcuaro politically, judicially, and fiscally, Quiroga is now a municipality responsible only to the State government in Morelia, although fiscally Quiroga is in the Pátzcuaro orbit and judicially in that of Morelia. (Only a few of the more important sources for the historical résumé are listed in the Bibliography. To document the foregoing pages adequately would require a bibliographic essay covering many pages. Such an essay has been worked up in connection with the historical part of our report on Quiroga, from

which history we have summarized portions of several chapters.)

MUNICIPAL GOVERNMENT

The *Municipio de Quiroga* is one of the 102 *municipios* (which we will term municipalities, but which are more like townships) into which the State of Michoacán is now divided. As a *municipio* it is, by National and State constitutions, a basic political unit next in order below the State. The municipality governs itself according to the regulations provided by the State congress, in conformity with the modified National and State constitutions of 1917. The most recent law regulating municipalities is the *Ley de Gobierno Municipal* published in Morelia, December 18, 1941.

The municipality of Quiroga is represented and administered by an *ayuntamiento*, selected by popular direct vote, which resides in the Villa de Quiroga. The *ayuntamiento* consists of five *regidores* or *municipes* who are elected for a term of 2 years. The municipality is divided into five electoral precincts, which are numbered from one to five, and each precinct or *sección* elects one of the *regidores*. A portion of the *ayuntamiento* or council is renewed each year. On the odd years three places are contested, and on the even years two places are subject to vote. Precincts vote in any given year according to whether their number is odd or even; e. g., in 1945 precincts 1, 3, and 5 elected *regidores*. To be a *regidor* it is not necessary to reside in the precinct electing; but the person must be a male citizen of Michoacán, possessed of full civil and political rights, born in the *municipio* or resident at least one full year previous to the election date, able to read and write, and not a State or Federal employee or in active military service. Also, among individuals who cannot be elected *regidor* are such as persons convicted of a major (nonpardonable) crime, those interested in municipal contracts, employees of the council, etc.; and not more than one person from any partnership or family group can be on the council at the same time. An examination of the records shows that some of the regulations have not always been observed; e. g., there have been *regidores* who could not write, individuals not resident in the area, members of the military, and two members of a family group on the council

at the same time. Ever since 1869 substitutes or *suplentes* have been elected at the same time as the regular or proprietary municipal officials. This was because of the frequency of absences. Such neglect of duty can be attributed to the fact that the office of *regidor* is honorary, obligatory, and without pay, although small remuneration may be received for work on special commissions. The substitute serves whenever his proprietary opposite is temporarily or permanently absent.

Theoretically most *municipios* are allowed one *regidor* for each 1,000 population, but if the total population exceeds the maximum number of *municipes* allowed by law (5 in the case of Quiroga), the precinct boundaries must be adjusted so that the population is more or less evenly distributed in as many precincts as there are allowable *municipes*. The boundaries of the electoral precincts are determined by an electoral council (whose make-up will be discussed later). Presumably the electoral council can indulge in considerable gerrymandering. An examination of the incomplete data pertaining to electoral precincts shows that there have been many shifts and recombinations. The *secciones* set up for the 1943 election of a Federal congressman (*diputado federal*) were: Sec. 1, *cuarteles* I and II of Villa Quiroga and ranchos Icuácato, La Tirímicua, and Zirandangacho; Sec. 2, *cuarteles* III and IV of Villa Quiroga and ranchos Atzimbo, Caríngaro, and Sanambo; Sec. 3, Pueblo de Santa Fe; Sec. 4, Pueblo de San Jerónimo; Sec. 5, Pueblo de San Andrés. This can be compared with the make-up of Sec. 4, a few years earlier, which was *cuartel* IV of Villa Quiroga and the ranchos Atzimbo, Icuácato, La Tirímicua, and Sanambo, while Sec. 1 comprised only *cuarteles* I and II of Villa Quiroga, Sec. 2 was *cuartel* III of Villa Quiroga and rancho Caríngaro, Sec. 3 consisted of the pueblos of San Andrés and San Jerónimo, and Sec. 5 was the Pueblo de Santa Fe.

ELECTION PROCEDURE

The direct popular vote is used for the election of *municipes*, State *diputado* and governor, Federal *diputado* and *senador*, and (until recently) the local judges or *jueces menores*. Male residents or *vecinos* of the municipality have the right to vote if they are Mexican citizens with full civil and political rights (not major criminals, habitual

drunkards or vagrants, outlaws, and the like), and are 21 or more years of age (18 if married). Thirty days before any election the electoral council must post in some public place a printed or typed list of all residents with right to vote in that election. During the next 25 days names may be challenged and the list can be corrected. These lists are based on the general census which is made by the electoral council once every 2 years, and which is kept up to date by a variety of means. The judge of the civil registry must send to the council every 3 months the names of all who have acquired the right to vote by marrying or becoming 21 years of age, and also the names (with sex and age) of all who have been born or who have died; the president of the *ayuntamiento*, chiefs of quarter and of block, et al., must send in the names of all citizens who have moved; and persons who have changed address also must notify the council. Both the general census and the electoral list must provide the following data: Name, age, status as to marriage, occupation, literacy, address. At least 3 days before the election a notification and credential of voting must be delivered to each qualified voter. This credential carries the name of the voter, the number of his ballot, the date of the proposed election, the purpose of the election, and the location of the voting center or table (*mesa*) to which the voter should report. All elections are held on Sunday, and between the hours of 9 a. m. and 5 p. m. When the voter appears at the voting center he exchanges his credential for a numbered ballot from each party having a candidate, and for a blank ballot in case he should wish to write in the name of an unregistered candidate. Then the voter selects the ballot of the party of his choice (or writes in on the blank ballot), doubles it and hands it to an official who deposits it in the vote container (*anfora*), and destroys the other ballots. Voters enter the voting place or *casilla* (booth), and vote one by one. As indicated above, each contesting party has its own printed distinctive ballot (*cédula* or *boleta*) upon which appear instructions for voting, the name and colored symbol of the party, the names of the party's candidates, and a space for the voter's number. A note at the bottom informs the voter that the number of his ballot will be used in the counting of the votes. The use of distinctive colored symbols by the various parties

probably derives from the fact that so many people cannot read, but propaganda has acquainted them with the symbols and colors of the various parties. It is possible that the use of the ballot number might provide interested parties with the means for determining how individuals have voted.

During the voting there have been present a president of the voting place, two secretaries, and two inspectors, who were selected by lot from slates presented by each party to the electoral council. After the polls close, all unused ballots are destroyed, the votes are tabulated, a record of the proceedings is drawn up and signed by the voting officials, and all the ballots and accompanying papers are made into a well wrapped and sealed package which is signed by the officials. Representatives of the contesting parties are present. The Wednesday after election day, the presidents of the various voting places meet to verify the returns from the individual polls and to certify the candidates who gained a majority. Before the end of 10 days this verification board must complete its work (ties are decided by lot), make up all the ballots and papers into a sealed package, and deliver it to the electoral college. In the case of municipal elections, the *ayuntamiento* constitutes the electoral college. The day after receiving the *expediente* the *ayuntamiento* passes on the vote and declares the winners. Ordinarily, elections for *municipes* are held on the first Sunday in December, and the successful candidates take office the following 1st of January.

POLITICAL PARTIES

The electoral council which sets up the election machinery in each *municipio* is made up of one representative from each registered political party, appointed by the party for a term of 2 years. This council is organized with a president, a secretary, and one or more ordinary members. There must be at least three members, and any lacks are made up by appointments made by the president and the syndic of the *ayuntamiento*. During 1944 and 1945 the president was Manuel Fuentes Ramírez, and the secretary was Salvador Fuentes V. For a number of years until recently (since we left Quiroga) there was only one registered party in Quiroga—the Government or Revolu-

tionary party (formerly PNR and PRM, now PRI). A registered party must represent a notarized assembly of at least 100 citizens; must have a directive board; may not have a religious name or represent any specific race; and must register its candidates with the electoral council at least 20 days prior to each election. In Quiroga there is a municipal committee of the Revolutionary party, the members of which are selected by a majority of the local members of the party. In the days when there was no other legal and registered party in Quiroga, competition was afforded by the three great sectors into which the national party is divided: Sector Agrario (Campesino) or rural workers, Sector Obrero or urban workers, and Sector Popular which includes the merchants, proprietors, industrialists, clerks, and the like. Actually the division tended to be dual, in which the town opposed the country, the landed were against the landless and the *ejidatarios*, the "whites" vied with the "Indians," the lower part of town or "El Centro" contended with the upper town or "El Calvario," and the *sinarquista* Roman Catholics were against the agrarian agnostics and atheists. From the beginning of modern constitutional government in 1917 until 1934 the Sector Popular (or its equivalent before the Sector Popular was formally incorporated into the Revolutionary party) controlled the *ayuntamiento*. Growing in part out of the resentments and disorders occasioned by the activation of the agrarian *ejidal* program 1929/32-, the political turmoil became so aggravated that the State government was forced to impose the municipal government 1934 to 1938. From 1938 through 1945 the Sector Campesino or Agrario was dominant, although members of the Popular and Obrero sectors were represented on the *ayuntamiento*. In 1946 the Sector Popular came into control again. By this time a second registered party had entered the scene—the conservative and religious (that is, proclerical) Partido de Acción Nacional, commonly known as PAN. This party drew support from the more devout Catholics, within all three sectors of the PRI, who were not in sympathy with the anticlerical attitude of that party. Also, the strong group of Sinarquistas (not yet organized as a registered political party) threw their support to the PAN slate of candidates presented for the

elections of December 1946. As a result, the *ayuntamiento* of 1947 was dominated by members of the PAN. Although the State governor refused to recognize the PAN *ayuntamiento*, and tried to install a competing PRI *ayuntamiento*, apparently the majority of the inhabitants of the *municipio* of Quiroga have backed the duly elected group.

THE AYUNTAMIENTO

The two or three new *regidores* meet privately, not later than December 20, with the three or two *regidores* who will continue the ensuing year, and by secret ballot the five *municipes* select from among themselves a president and a syndic. On the following 1st of January the new *ayuntamiento* is installed in office, and the outgoing president reports on his term of office. On the same day the new *ayuntamiento* designates by majority vote a secretary and a treasurer (not of their group). The five *regidores* or *municipes* constitute the true and complete *ayuntamiento* or township council. This council nominates the two judges or *jueces menores*, who are often popularly considered to be a part of the *ayuntamiento* (as once they were in fact), but they and their secretary are more properly to be considered as adjuncts of the *ayuntamiento*. The *ayuntamiento* meets in the municipal building, locally termed

Palacio Municipal, and is required by law to meet at least once a week, and to keep minutes of each meeting. Actually, there may not be more than a meeting every 2 or 3 months. According to the minutes, there were meetings in 1941 on January 1, April 7, June 18, August 10, and December 12, 16, 28, and 31; in 1942 there were meetings January 3, 10, and 13, April 28, May 23, June 20, August 4 and 6, November 24, and December 10, 14, and 28; and in 1943 there were meetings January 1, 4, 11, 18, and 28, February 10, March 15, April 26, May 27, June 11, 12, and 17, July 6, August 3 and 9, October 21 and 29, and December 12, 15, and 29. A loose sheet inserted in the book for 1943 carried a typed statement that no minutes were kept of four of the meetings in that year. The sessions of the *ayuntamiento* are public unless two-thirds or more (so the law reads!) of the *regidores* vote for a secret or closed meeting.

Although the present number of *regidores* is five, the number to which the *municipio* of Quiroga has been entitled has ranged as high as 12, and during much of its history was 7. When we began work in Quiroga the *ayuntamiento* for 1945 was composed as shown in table 21. The elections of December 2, 1945, in the three odd-numbered sections resulted in victory for the Sector Popular in two of the three precincts. The resultant *ayuntamiento* during 1946 is also shown in table 21.

TABLE 21.—Composition of *ayuntamiento* in 1945 and 1946

1945					
Name	Section	Date elected	Party	Residence	Comments
Prop. Leopoldo González Leal	1	Dec. 5, 1943	Campeño	Quiroga	Shot to death (accidentally, it is said) Dec. 29, 1944.
Sup. Manuel Huacuz	1	do	do	Santa Fe	
Prop. Onésimo Calderón	2	Dec. 3, 1944	do	Quiroga	Resigned.
Sup. Venancio Cuiriz	2	do	do	Santa Fe	
Prop. Heliodoro Anita Val.	3	Dec. 5, 1943	do	El Calvario	President.
Sup. Feliciano Gabriel M.	3	do	do	Santa Fe	
Prop. J. Encarnación Medina F.	4	Dec. 3, 1944	Popular	Centro	Syndic.
Sup. Alberto Tovar A.	4	do	do	do	
Prop. Daniel Coria	5	Dec. 5, 1943	Campeño	Went to U. S. as "bracero."	
Sup. Juan González V.	5	do	do	San Andrés	
1946					
Prop. Manuel Fuentes Torres	1	Dec. 2, 1945	Popular	Centro	
Sup. Gilberto Romero Fuentes	1	do	do	do	
Sup. Venancio Cuiriz	2	Dec. 3, 1944	Campeño	Santa Fe	
Prop. Ubaldo Chávez	3	Dec. 2, 1945	Popular	Centro	Syndic.
Sup. Salvador Barriga	3	do	do	do	
Prop. J. Enc. Medina Fuentes	4	Dec. 3, 1944	do	do	President.
Sup. Alberto Tovar A.	4	do	do	do	
Prop. Amador Peña Valdovinos	5	Dec. 2, 1945	Campeño	Calvario	

In connection with the election of December 2, 1945, we noted that in one polling center of section 1, only 42 persons voted out of the 174 qualified voters. This can be compared with the 30 who voted in section 2 on December 3, 1944, out of 357 who were eligible.

Some earlier *ayuntamientos* were:

1944

1. Leopoldo González Leal
2. José Calderón Márquez (Syndic)
3. Heliodoro Anita Val. (Pres.)
4. Indalecio Chagolla Estrada
5. Daniel Coria

1943

1. Amador Peña Valdovinos
2. José Calderón Márquez
3. J. Encar. Medina Fuentes (Syndic)
4. Indalecio Chagolla Estrada (Pres.)
5. Jesús González Villanueva

1942

1. Amador Peña Valdovinos (Pres.)
2. Diego Fuentes Barriga
3. Leopoldo Estrada Torres (Syndic), replaced by *suplente* J. Encar. Medina F.
4. Doroteo Barajas, died, replaced by *suplente* Heliodoro Anita V.
5. Antonio Zúñiga, replaced by *suplente* Jesús González V.

The State government has defined a considerable list of rights and duties of an *ayuntamiento*. These various functions are to be exercised by the *ayuntamiento* as a whole, or may be delegated to individual *regidores*, municipal employees, special municipal commissions, and the representatives of the municipal government in the descending hierarchy of governmental units. These governmental units fall into four ranks or classes below the Villa de Quiroga which is ruled directly by the *ayuntamiento* resident there. The three dependent pueblos and their respective lands are termed *tenencias* or *secciones*, and in each there is a *jefe de tenencia* who may be appointed for 1 year by the *ayuntamiento* unless the pueblo requests the right to elect him. These three *tenencias* have existed as such during all of modern history; but the title sometimes has been *Jefatura de Policía*, and the representative of the *ayuntamiento* has gone by such names as *alcalde* and *jefe de policía*. In the settlements (*poblaciones*) of lesser rank than pueblo

there are *encargados del orden* who are appointed by the *ayuntamiento* or elected on request of the community. In Quiroga there are six ranchos, each with its *encargado del orden* who is commonly appointed. Beginning with a law of 1827, all settlements are supposed to be divided into *cuarteles* or quarters, and the *cuarteles* into *manzanas* or blocks. Usually this is done only in the pueblos and settlements of higher rank. Formerly each quarter had its chief (*jefe de cuartel*), but this no longer is officially required. At the bottom of the hierarchy is the *manzana* with its appointed *jefe*. As is shown elsewhere, the number of *manzanas* varies considerably within any period of several years, and often a scantily populated block will have the same chief as a neighboring block. The principal duties of the *jefes de tenencia*, *encargados del orden* and *jefes de manzana* are to look after pertinent roads, bridges, signs, and the like; maintain the public order; see that their areas are kept clean, sanitary, and sightly; and provide requested statistical information.

Among the principal duties of the *ayuntamiento* are (arranged in the order of mention in the pertinent law):

1. To foment education, higher wages, greater production, sports, improvement of livestock, and small industries; and to guard lands, pastures, and woods.
2. To look after public services.
3. To invest properly the income from the civil register in improving the cemetery and other items pertaining to the civil registry.
4. To make rules for the interior government of the *municipio*, and create the necessary offices and departments.
5. To administer the treasury according to the allowances made by the State congress in its budget, and collections made in conformity with the "Law of Municipal Finance."
6. To recommend to the State governor expropriations for sites of hospitals, schools, markets, etc.
7. To list real estate belonging to the municipality with the State cadastral and general auditor of accounts offices.
8. To combat alcoholism, delinquency, vagrancy, and begging; and to found or foment the establishment of night rests, public cafes, maternity homes, orphanages, old-age homes, technical schools, etc.
9. To foment tourism and the sales of regional products.

10. To guard and regulate good manners and morals at public spectacles; and to prevent the showing of theatrical acts and movies not previously authorized.
11. To preserve and respect the right of thinking, including its oral and written expression.
12. To examine and pass on plans for new buildings so as to insure that the buildings are safe, hygienic, and in accordance with local architectonic style.
13. To divide the settlements into quarters and blocks.
14. To determine and post the names of streets, and to number the houses and public buildings.
15. To provide, to the greatest possible extent, drinking water, drainage, electric lights, etc.
16. To prepare, for presentation to the State congress, an estimate of income and expenditures for the succeeding year.
17. To keep municipal statistics and to provide data whenever so requested by the State or the Federal Government.
18. To install, in the center and at the exits of towns, signs with the name of the community and the distance in kilometers to the next.
19. To organize civic, patriotic, and cultural programs.
20. To draw up a census of children of school age.
21. To publish a monthly statement on the condition of the municipal treasury.
22. To see that children go to school (public).
23. To organize the municipal police or security force.
24. To check the quality of drinks and foods sold.
25. To look after public squares, markets, parks, slaughterhouses, gardens, jails, and cemeteries.
26. To protect and foment agriculture, industry and commerce—provide seeds for experiment, sponsor fairs, make plantations of trees, study the natural resources (flora, fauna, minerals), etc.
27. To combat drugs of the opium group, marihuana, and alcoholism.
28. To foment cooperative societies.
29. To cooperate with State and Federal forestry officials; promote reforestation, put out forest fires, regulate the use of the woods, etc.

Obviously, many of the items mentioned are not necessary, feasible, or appropriate in a small *municipio* such as is Quiroga. Furthermore, municipal activity in most lines represents the personal interests of the *municipes* or strongly organized opinion among the influential citizens of the area.

Specifically, the *ayuntamiento* may not collect excise taxes (*alcabalas*), act in a judicial capacity,

create imposts without permission of the State congress, spend for purposes not specified in the budget, grant permission to build in public areas or places, or meddle in the *ejidal* administration or that of the Indian community. The last clause would seem to set up a municipality within a municipality, with respect to the Comunidad Indígena de Quiroga which is also the *ejidal* element in Quiroga.

THE MUNICIPAL PRESIDENT

The *regidor* selected as *presidente* of the *ayuntamiento* is the municipal president and approximates a mayor in some cities of the United States. Since his term of office, as a *regidor*, is for 2 years, often the same man will be president for two consecutive years. Neither he nor any of the other *regidores* may be reelected until at least 1 year has elapsed. The president must hold public audience daily. He is the one who grants permits for public meetings, as well as many other types of permits. In addition to convening the *cabildo* or meeting of the *ayuntamiento*, and presiding over its deliberations, the president has the primary responsibility for the carrying out of all the functions of the *ayuntamiento*. Also, it is specifically stated that he must maintain a brand or patent book (*Registro de Fierros, Marcas y Señales*) in accordance with the livestock and finance laws, call on people to help put out fires, see that the municipal archives are kept in good order, and serve as Honorary Judge of the Civil Status (Civil registry of births, marriages, and deaths) if no special functionary is present.

In earlier years the position of municipal president went to one of the most respected and (commonly) wealthiest men of the community, and never went to a resident of one of the pueblos or ranchos, or to a member of the Comunidad Indígena in the upper or Calvario part of Quiroga town. This has not been true since the revolution, and especially during the past 14 or 15 years. For its genealogic, sociologic, and political values, we have compiled a list of the presidents since 1862. There is no single source, and some complete gaps in the record exist. From the minutes or *actas* of the *ayuntamiento*, and from the various books, papers, and credentials that the president had to sign, we were able to obtain the names of nearly all the presidents.

*Prefectorial Period, 1855-68*¹

1862. Prefect: José María Rojas.
 1863. Prefect: Juan Arellano. President: Francisco Castañeda and José María Domínguez.
 1864. Subprefect: Juan Arellano. President: Francisco Castañeda, Primo Serranía, Joaquín Valdés, Rafael Cuiriz.
 1865.
 1866.
 1867. President: José María Rodríguez, Rafael Calderón Cervantes, Francisco Lara, Francisco Gutiérrez, Francisco Robles, Gerónimo Ponce, Marcos Villanueva.
 1868. President: Marcos Villanueva and Francisco Castañeda.

Unsettled Period, 1869-76

1869. Octaviano Valdez, José María Torres Navarrete.
 1870. José María Rojas, Urbano Alcaraz, Camilo García.
 1871. Camilo García, José María Torres Navarrete, Rafael Calderón Cervantes.
 1872. Jesús Villanueva Barriga, José María Rojas.
 1873. Sixto León, José María Valdés, Primo Serranía, Francisco Lara.
 1874. Rafael Arellano, José María Rojas.
 1875. Antonio Torres Leal, Gerónimo Ponce, Cesareo Rojas, Joaquín Valdés.
 1876. Rafael Arellano, Trinidad Valdés, José María Rojas.

*Pax Porfiriana, 1876-1910*²

1877. Sixto León, Cesareo Rojas, Joaquín Valdés, Jesús Villanueva Barriga, Nestor León.
 1878. Trinidad Valdés, Nestor León.
 1879. Trinidad Valdés, Juan E. Calderón Pureco.
 1880. Juan E. Calderón Pureco, Nestor León, Trinidad Valdés.
 1881. Trinidad Valdés, José María Rojas.
 1882. José María Rojas, Jesús Villanueva, Nestor León, Trinidad Valdés, Sixto León.
 1883. Francisco Domínguez, Sixto León, Cesareo Rojas, Jesús Villanueva.
 1884. Primo Serranía, Isidoro Gutiérrez, Antonio Calderón Pureco.
 1885. Trinidad Valdés, Basilio Campusano.
 1886. Sebastián D. Ortega, Isidoro Gutiérrez, Nestor León.
 1887. Trinidad Valdés, Primo Serranía, Luis Torres Mendoza, Rafael Calderón Cervantes.
 1888. Isidoro Gutiérrez, Dr. Victoriano León Ponce de León, Antonio Calderón Pureco.
 1889. Trinidad Valdés, Primo Serranía, Isidoro Gutiérrez, Antonio Calderón Pureco.

1890. Isidro Calderón, Gregorio F. Cendejas, Trinidad Valdés.
 1891. Isidro Calderón, Nicanor Tovar, Francisco Domínguez.
 1892. Lic. Francisco Torres Mendoza, Isidro Gutiérrez, Francisco Domínguez, Juan E. Calderón.
 1893. Silviano Valdés, Lic. Francisco Torres Mendoza, Rafael Gaona, Dr. Victoriano León Ponce de León, Nicanor Tovar.
 1894. Isidro Calderón, Juan E. Calderón, Odilón Tovar.
 1895. Antonio Torres Leal, Silviano Valdés, Lic. Francisco Torres Mendoza, Nicanor Tovar, Rafael Gaona.
 1896. Justo Campusano Nares, Isidro Calderón, Odilón Tovar.
 1897. Francisco Gutiérrez Silva, Melesio Padilla, Juan E. Calderón, Francisco Domínguez.
 1898. Isidro Calderón, Apolonio Valdés, Odilón Tovar.
 1899. Justo Campusano Nares, Isidro Calderón, Lic. Francisco Torres Mendoza, José María Domínguez Guzmán.
 1900. Nicanor Tovar, Apolonio Valdés, Francisco Elizarraras, Prisciliano Chagolla.
 1901. Nicanor Tovar, Odilón Tovar, Isidro Calderón, Antonio Calderón Pureco, Lic. Francisco Torres Mendoza, Apolonio Valdés, José María Domínguez Guzmán.
 1902. José María Domínguez Guzmán, Isidro Calderón, Apolonio Valdés, Dr. Victoriano León Ponce de León, Luis Torres Mendoza, Lic. José Trinidad Ponce de León.
 1903. Lic. José Trinidad Ponce de León, Dr. Victoriano León Ponce de León, Luis Torres Mendoza, Odilón Tovar, Isidro Calderón.
 1904. Isidro Calderón, Lic. Francisco Torres Mendoza, Dr. Victoriano León Ponce de León, Pedro Gaona Torres.
 1905. Pedro Gaona Torres, Luis Torres Mendoza, Gerónimo Ponce, Odilón Tovar, Isidro Calderón.
 1906. Silviano Valdés, Luis Domínguez León, Lic. Francisco Torres Mendoza, Rómulo Villanueva, Jesús Villanueva Tovar, Nestor León.
 1907. Nestor León, José Jesús Barriga Torres.
 1908. Nestor León, Dr. Jesús García Pita, José Jesús Gutiérrez (not a native), José Vincente Calderón.
 1909. José Jesús Gutiérrez, José Vicente Calderón, José Tena Ortiz (a native of Cuitzeo).
 1910. José Tena Ortiz, Lic. Francisco Torres Mendoza, Dr. Victoriano León Ponce de León, Juan Francisco Padilla.

Period of the Revolution, 1910-17

1911. Juan Francisco Padilla, Federico Villanueva Ortiz, Dr. Jesús García Pita, Lic. Francisco Torres Mendoza, Apolonio Valdés, Gerónimo Ponce, Luis Torres Mendoza.
 1912. Luis Torres Mendoza, Gerónimo Ponce, Apolonio Valdés, Narciso Arias, Primitivo Elizondo, José María Domínguez Guzmán, José Vincente Calderón.

¹ During these years, and for many years to come, several to all of the members of the *ayuntamiento* would serve a part of the year as president and were known as *presidente en turno*. Also, some served temporarily in the absence of the elected president. Beginning at some uncertain date, *ayuntamientos* and presidents took office on the 16th of September. Apparently about 1917 presidents began to be elected for the entire year, and the *ayuntamientos* were installed on the 1st of the calendar year.

² All but two of those listed were natives of the Quiroga area, and all were residents of the lower town or "El Centro."

1913. José María Domínguez Guzmán, Dr. Jesús García Pita, Salvador Castro, Luis Torres Mendoza, Jesús Mier Corral, Francisco Ayala, Narciso Arias.
1914. Narciso Arias, Angel Mier Estrada, Rómulo Villanueva, Ramón Fuentes y Fuentes, Jesús Mier Corral, Francisco Ayala, Pedro Fuentes Silva, Secundino Campuzano Nares.
1915. Pedro Fuentes Silva, Secundino Campuzano Nares, Luis Gonzaga Torres, Jesús Mier Corral, Luis Lopes and Jesús Telles (the last named was the first "stranger" and the first president who could not write).
1916. Jesús Telles, Ausencio Pantoja, Severiano Fuentes, Diego Fuentes Ayala, Pedro Fuentes Silva.
1917. Pedro Fuentes Silva, Diego Fuentes Ayala, Marcelino Gutiérrez, Felipe Magaña, Alfredo Arias.

Carranza-Obregón-Calles Period, 1918-34

1918. Diego Fuentes Ayala (Sector Popular).
1919. Macario Farías, Federico Villanueva Ortiz, Salvador Huerta Ayala (all Sector Popular).
1920. Salvador Huerta Ayala (Sector Popular).
1921. Salvador Villicaña Torres, Luis Gonzaga Barriga (both Popular).
1922. Ramón Fuentes y Fuentes (Sector Popular).
1923. Ramón Fuentes y Fuentes, Marcelino Gutiérrez (both Popular).
1924. Onésimo Chagolla Vernal (Sector Popular).
1925. Onésimo Chagolla Vernal (Popular).
1926. Diego Fuentes Ayala, Manuel Fuentes Ramírez, Francisco Ayala Torres, Luis Gonzaga Torres (all Sector Popular).
1927. Efrén Chagolla (Popular).
1928. José Jesús Guzmán Carrillo (Popular).
1929. Salvador Huerta Ayala, Pedro Goana Torres, Francisco Chagolla Vernal (all Sector Popular).
1930. Francisco Chagolla Vernal, Francisco Ayala Torres, Eustorgio Fuentes (all Popular; but the State governor removed the first two).
1931. Onésimo Chagolla Vernal (Popular).
1932. Onésimo Chagolla Vernal (Popular).
1933. Javier Torres Leal (Popular).
1934. Tomás García Torres (Popular).

Agrarian Reform Period, 1934-40

1935. Onésimo Chagolla Vernal served in January. Agrarian dissension caused a military imposition of Captain Miguel S. Contreras, Major Antonio López Martínez, and Captain Antonio Yáñez Rosiles during the remainder of the year with the civilian secretary Isidoro García from Guanajuato filling some gaps.
1936. The imposed government continued through 1936 with Isidoro García, Captain Manuel Pérez Rubalcaba, and Juan Bautista Rodríguez (a native of Purépero, Michoacán).
1937. Juan Bautista Rodríguez continued the imposed government until he was assassinated in his office May 4, 1937. His successor was José Jesús Cha-

- golla Mejía, the first president from the *barrio* El Calvario and representing the Sector Agrario.
1938. Florentino Gabriel Martínez (the first president from Santa Fe, and a representative of the Sector Agrario or Campesino).
1939. Florentino Gabriel Martínez (to September), and Leopoldo González Leal (a native of Tzintzimatcato, Michoacán) to the end of the year (both Sector Campesino).
1940. Leopoldo González Leal (Campesino).

Current Period, 1941-

1941. Leopoldo González Leal (Campesino).
1942. Amador Peña Valdovinos (Campesino; from the Calvario district of Quiroga).
1943. Indalecio Chagolla Estrada (Campesino; from El Calvario).
1944. Heliodoro Anita Valdovinos (Campesino; from El Calvario).
1945. Heliodoro Anita Valdovinos (Campesino).
1946. José Encarnación Medina Fuentes (Sector Popular).
1947. Manuel Torres Serranía (PAN).

There will be noted some interesting changes in representation of family names through the years. Old families that lost out during the revolutionary years include Calderón, Domínguez, León, and Ponce. Families that became represented during the same years 1910-14 include Arias, Ayala, and Fuentes. Since 1937 the Calvario families such as Peña, Anita, and Valdovinos begin to appear. Families that have contributed five or more different men are the Chagolla, Torres, Valdés, Villanueva, Fuentes, Calderón, and Gutiérrez. The men who were president more than seven times were Trinidad Valdés, Isidro Calderón, and Francisco Torres Mendoza. The outstanding family, counting both the father and mother lines, easily is the Torres family. As is shown elsewhere, the Torres family has been the outstanding family in Quiroga at least since 1811.

THE SYNDIC

The *síndico* or syndic is the *regidor* who functions as the attorney general or business agent for the municipality. According to the law the syndic must have some knowledge of law, represent the *ayuntamiento* in legal matters, check contracts, and act as an agent for the State and Federal attorneys general. This position, which requires more education and practical experience than any other in the *ayuntamiento*, consistently has gone to a resident in the business district or "El centro" who was also a member of the Sector Popular. Recent syndics have been: 1946, Ubaldo Chávez;

1945, J. Encarnación Medina Fuentes; 1944, José Calderón Márquez; 1943, J. Encarnación Medina Fuentes; 1942, Leopoldo Estrada Torres and J. Encar. Medina Fuentes; 1941, Doroteo Barajas; and 1940, Fidel Cásarez F. and Ambrosio Herrera. Structures built by the municipality commonly carry the names of the municipal president and syndic who were in office at the time.

REPRESENTATIVES OF THE AYUNTAMIENTO

Since the *tenencias* are not within the area of our report, we will not discuss the *jefes de tenencia*. The *encargados del orden* in the six ranchos are appointed sporadically, and may remain in office for a number of years at a stretch. On occasion the *encargado del orden* will be the only person in a rancho who can read or write, although we encountered two who could not read. The duties of this office have been outlined previously. The chiefs of the four quarters or *jefes de cuartel* have very little real function, and apparently are no longer official. However, the possibly honorific title still obtains since we met two individuals who were referred to as being *jefe de cuartel*. The real work is carried out by the block chiefs or *jefes de manzana*. They serve as wardens, census takers, and messengers from the *ayuntamiento* to the families in their blocks. For example, when the primers for the recent literacy campaign were received in Quiroga, each chief saw to the distribution in his block.

EMPLOYEES OF THE AYUNTAMIENTO

The *regidores*, as such, serve without pay, but the president receives \$3.00 (3 pesos) a day and the syndic gets \$1.50 a day. The regular employees are: the secretary of the *ayuntamiento* who earns \$4 a day; the treasurer of the municipality who averages about \$5 a day; the scribe or secretary of the civil register, \$3; the secretary of the local court or *juzgado menor*, \$2.50; the chief of police or corporal of the guard (*cabo*), \$2.50, and each of the four policemen or *gendarmes*, \$2.25; the inspector of the slaughter house, \$2; the *fontanero* or man in charge of the town water supply system, \$1.50; the street cleaner (who is also municipal carter, and caretaker of the cemetery), \$1.50; the town gardener, \$1.75; and the custodian of the town clock, who receives \$72 a year.

The secretary is appointed by and keeps his job at the pleasure of the *ayuntamiento*. Actually,

the secretary and the treasurer carry out the major part of municipal business; and the secretary, by virtue of being "front" or contact man, and from being entrusted with the records, often occupies a position of influence and power. By law the secretary keeps the minutes of the *ayuntamiento*, makes out all necessary papers and carries on official correspondence, and is in immediate charge of the municipal archives. The man who was secretary while we were in Quiroga was the nearest equivalent of a professional politician and bureaucrat existing in that community. He had been on municipal, State, and Federal pay rolls most of the past 30 years, and had been secretary more times and longer than any other person. His last two periods as secretary were 1931 into 1935, and 1941 into 1946. Although he was helpful to us in many ways, nevertheless his procrastination and his faulty memory or poor filing system prevented us from obtaining all the information that should have been available in his office.

The most interesting records in the secretary's office are the minute books. None earlier than September 16, 1869, was located. Although *Libros de Actas del Ayuntamiento* should exist from the beginning of municipal government, either the earlier numbers were destroyed during some civil war or the French Intervention, or else the volumes prior to 1869 were among the "old documents" called in to Morelia in 1895. However, none were located in the State archives. The existing file of minute books is quite incomplete. The years covered are: 1869 to April 1880; March 1889 to August 1900; January 1929 to January 1935; and July 1940 to January 1944. Either the minutes for 1944 to 1946 were not kept, or they were not typed for public perusal. The secretary claimed that the revolutionary chief Inez Chávez García had burned many of the books in 1917, and that in 1927 a band of Cristeros led by Ladislao Molina of Pátzcuaro and Alfredo Elizondo of Tacámbaro burned other books and records. We still have to wonder what happened to the books for 1928, and 1935 to 1940. The latter books especially would have given much valuable information about the "imposition" period and the agrarian dissensions.

The other records in the secretary's office were: a register of correspondence for 1924 and 1925; books containing fines and punishments imposed by the municipal president 1886-94 and 1931-39; and books covering the initial inscription of owners

of livestock with their patented brands and other marks, and reinscriptions and renewals of brands, in general 1870 to date with some breaks.

MUNICIPAL FINANCES

The municipal treasurer is appointed by the *ayuntamiento*, and must post bond. His chief duties are to collect municipal imposts, maintain the treasury office and records, each December make an inventory of municipal property and other assets, make payments on authorization of the municipal president and the financial committee, and prepare a monthly statement with copies for the *ayuntamiento*, State congress, State department of the interior, and State auditor's office. Since March 16, 1941, Don Justo Campuzano Torres has been the municipal treasurer.

The municipal income is derived from the taxes, imposts, and other sources specified by State and Federal laws. The existing law is the *Ley de Hacienda para los Municipios del Estado*, published in Morelia, December 23, 1939. The law lists some 21 categories for sources of income, which are divided into five groups. These are carried on the books in Quiroga within 12 general branches or *ramos*. We will discuss the more important categories by number and name, and arranged in the order of the groups. The first eight items are referred to as normal taxes or *derechos*.

1. *Derechos de abasto*.—Butchers, owners, and/or handlers of cattle (all quadrupeds killed for food) must pay a tax upon the slaughter of the animal or animals in the *abasto* or municipal slaughterhouse. Quiroga has had three *abastos* or *rastros* during the past one hundred years. The slaughterhouse is always situated on the outskirts of town near a good supply of water. At present the "new slaughterhouse" is located at the exit from town on Calle Zaragoza. Either the treasurer or the *inspector del rastro* is present to check the title and brand of each animal before it is killed, and to see that the *derechos* (listed under Nos. 6 and 9) on brands and sales have been paid. All animals (oxen, swine, sheep, and goats) presumably must be slaughtered in the public *abasto*, but in actual practice there are very few sheep and goats killed, and this is normally done elsewhere. The treasurer must file the papers proving title to the animal or animals slaughtered. The inspector or *encargado de la matanza* must keep a book in which daily entries must be made of every animal killed: kind

of animal, color of skin, original owner's brand, brands of later owners, special markings, origin (farm, rancho, etc.) of the animal, weight, taxes paid, names of the last buyer and seller, and the number on the record paper filed with the treasurer. The informer of clandestine slaughter receives 50 percent of the fine. Animals that die or that are killed away from the *abasto* must be taken there for sanitary inspection. The reason for so much attention to details in connection with the *derechos de abasto* becomes apparent when an inspection of the municipal accounts reveals that between one-fifth and one-third of the municipal income is derived from this tax. The actual tax is computed on the basis of 0.04 of a peso (i. e., 4 centavos) per kilogram of the weight of the dressed ox or pig plus the hide or skin, and 0.06 per kilogram on sheep and goats. Fresh, dried, and barbecued meats, upon which a tax has not previously been paid, must be taxed upon being brought from one *municipio* into another. In recent years 250 to 350 oxen and 350 to 450 hogs have been killed annually. Recent receipts have run (rounded to the nearest peso) monthly:

	1943	1944
January.....	\$344	\$244
February.....	243	205
March.....	221	233
April.....	193	243
May.....	190	197
June.....	143	184
July.....	177	206
August.....	223	169
September.....	253	202
October.....	301	193
November.....	251	182
December.....	237	275

2. *Derechos de mercados*.—These taxes are paid by those who occupy space within the public markets; by those who have space, stalls or booths in porches, halls, entrances, and other accessories of buildings; and by those who use the streets and public roads. Traveling merchants and those who use the streets pay \$0.05 to \$10 daily, according to the nature and cost of their goods. Merchants in *puestos* (literally "places") in and away from the *mercado* or plaza pay \$0.05 to \$0.30 per square meter daily. Semipermanent or movable stalls and booths (*expendios o puestos semifijos*) in or along side of public places and streets cost \$0.05 to \$0.75 daily. On feast or fair days (including all Sundays) rates may be increased 100 percent. These *derechos* are collected daily, and

printed receipts provided by the State accountant's office are issued. A monthly list of all persons paying *derechos de mercado* must be submitted to the accountant's office. Individuals whose stock of merchandise is worth less than 1 peso pay no taxes. While we were in Quiroga the merchants of cloth ("yard goods") and clothing who occupied public areas paid \$0.50 to \$1 per day, and the other merchants who occupied the same space every day paid \$0.10 daily. Those who came only for the Sunday markets paid \$0.05 to \$0.10. Besides the sellers of cloth, the leading "semi-permanent" merchants with *puestos* and *expedios* were those who sold food, soft drinks, ice cream, and regional products such as pottery and woodwork. For the Sunday *mercados* or *días de plaza* white chalk was used to define the different *puestos*. Revenue from the *derechos de mercados* commonly ranks second only to the *abasto* taxes, and constitutes one-seventh to one-fifth of the total income. Recent monthly income (rounded to the nearest peso) has been:

	1943	1944
January.....	\$137	\$197
February.....	125	211
March.....	141	238
April.....	162	276
May.....	147	223
June.....	122	195
July.....	122	212
August.....	137	195
September.....	177	312
October.....	145	218
November.....	132	201
December.....	194	327

3. *Derechos de aguas*.—By law every owner of an urban house located on a street with water supply (available pipe or *tubería*), whose property is valued at 200 or more pesos (in *municipios* of the second category), must place water in the house. This applies also to all types of business where water is used; e. g., saloons, restaurants, etc. There are special rates for public baths, hotels, and other commercial and industrial enterprises, the rates for which are determined by a special committee composed of the municipal president and treasurer, the State tax collector in the municipality, and one ordinary citizen. Special contracts may be made with persons wishing to utilize municipal water for irrigation, but the scarcity of water has been so great for so many years that such use practically does not exist. During our first stay in Quiroga, in 1945, the

municipality was raised from the lowest or third fiscal rank to the second; and this automatically raised the tax rate on water, burials, and some other items. Since we had been carrying out a detailed survey of the community, many of the citizens thought that we must be governmental assessors, and blamed us for the increase. The legal rates are (per faucet) \$2 a month in properties valued at less than \$500; \$2.50 a month in properties valued at \$500 to \$2,000; \$3 a month for properties valued at \$2,000 to \$5,000; and \$4 a month for private houses valued at more than \$5,000. Only the two lowest categories were present in Quiroga, together with a few commercial and industrial enterprises which paid between \$5 and \$10. The water tax is collected monthly in advance, and there is no reduction, rebate or cancellation of tax in case of scarcity or lack of water unless there has been complete lack of water for more than 30 consecutive days. The history and nature of the water supply is discussed elsewhere. The cost of installing water pipe to a private establishment is met by the owner, but thereafter the piping is the property of the municipality and must be kept in repair by the municipality. Federal, State, and municipal buildings pay no water-use tax. The general laws pertaining to the regulation and distribution of waters belonging to the municipality are still based on the law of May 21, 1906. Revenue from water usually occupies fourth place among the sources of municipal income. Recent monthly income has been (rounded to the nearest peso):

	1943	1944
January.....	\$95	\$105
February.....	93	107
March.....	93	107
April.....	91	107
May.....	91	107
June.....	92	111
July.....	92	109
August.....	90	109
September.....	90	109
October.....	90	109
November.....	90	109
December.....	94	113

4. *Derechos del registro civil*.—The law provides for an elaborate scale of fees for registry of births and performance of the civil marriage ceremony, according to whether performed in the home or in the office, and within office hours or at unusual hours, and according to the wealth of the family concerned. However, no charge is made for

registering births in the office within regular office hours; and, at least within recent years, all births have been so registered. Where the fee is variable, the law allows the scribe of the civil registry and the municipal treasurer to determine which quota is applicable. This has been done in Quiroga with reference to civil marriages. Apparently all civil marriages are performed in the office within regular hours. Within a municipality of the second class such marriage ceremonies cost the members of the richest families \$20 to \$25, while the families of intermediate economic position pay \$10 to \$15, and poor families pay \$4. The marriage application costs \$1. The recognizing or legitimizing of "*hijos naturales*," the inscription of an adoption, certification of age, and comparable items carry a fee of \$5. The inscription of a record of divorce costs from \$10 for the poor to \$50 for the rich. A search for some specific record, when the year is not known, costs \$1 for each year examined, but the total cost is not to exceed a maximum of \$5. The income from the civil register is minor, and does not equal the salary of the *encargado del registro civil*. There is no charge for the inscription of a death. However, there are attendant charges which are discussed under the next heading.

5. *Derechos de panteones*.—The cemetery belongs to the municipality. Ever since 1833 it has been illegal to bury in churches, and the construction of cemeteries apart from the grounds in front of and around the churches was required. However, Quiroga did not construct a cemetery until 1850, and rumor and tradition have it that persons were buried in and near the parish church occasionally even after that date. By law there are some four types of burial the fees for which vary with the capacity to pay. A burial, which will be undisturbed for 5 years, in the general burial area costs the three economic classes, respectively, \$4, \$10, and \$20. All of the recent burials in Quiroga have been of this type. Burial, for 5 years, in an isolated or "distinguished" part of the cemetery costs \$10 to \$40. A perpetual sepulcher, in whatever location, costs \$50 to \$200, and the annual quota per body must be paid in addition. Annual renewals, after the first 5 years, cost 25 percent of the original charges. Burial in the "potter's field" or *fosa de cuarta clase* is free. Permission to remove a cadaver from the *municipio* of death

to another costs \$50 to \$100. There are no charges for marriages or burials of State and municipal employees or pensionaries. The individuals in charge of the cemetery (the caretaker and scribe of the civil register) must keep a record of all burials with category and fee paid. The scribe of the civil register must make public monthly a list of all inscriptions of death and burial, marriage, birth, etc., and copies go to the municipal archives, the municipal treasurer, and the State auditor's office. While we were in Quiroga we did not see such lists.

6. *Derechos de registro y refrendos de patentes de fierros*.—Ever since 1870 the municipalities have been required to keep records concerning the number of livestock owned and the brands employed in the municipality. All large livestock or *ganado mayor* (oxen and equines) must be marked by a branding iron within the first 2 years after birth, or else upon acquisition of a nonbranded animal. Within 15 days after establishing a livestock business (commonly, five or more animals), the cattleman must select and present a unique brand before the municipal secretary. Then, in the book entitled "*Matrícula de dueños de ganados*," there must be registered the name and address of the owner, the location of his pastures, the kind and number of cattle, the date, a sketch of the brand, and a statement of the charges. This must be signed by the municipal president, secretary, and treasurer. No brand may be identical with or confusingly similar to another valid brand within the municipality. When a man ceases to own cattle, he must extinguish the brand by formal notification. The tax rate, upon registering a brand, is for 1 to 5 head of livestock, \$3; for 6 to 10, \$5; 11 to 20, \$10; 21 to 40, \$15; 41 to 60, \$25; 61 to 100, \$40; and on in this fashion, until a man with more than 1,000 head pays a tax of \$500. Every year in the second half of December the municipal president must post a list of all persons with valid brands, and these men must revalidate (*refrendar*) their brands and number of cattle the ensuing January. Fees for this *refrendo de patente* are: for 1 to 5 head, \$2; 6 to 20, \$4; 21 to 50, \$8; 51 to 100, \$20; 101 to 150, \$30; and on, until the man with more than 1,000 head pays \$300. Practically no new brands have been matriculated in recent years, and apparently it has become the custom to make a flat charge of \$5 no matter what the number of livestock owned. These *derechos*

commonly rank about sixth or seventh in income produced. Nearly all of it comes in during January.

7. *Derechos de licencias*.—These taxes cover licenses for commercial and industrial enterprises, other than new and worthy enterprises which are not taxed for the first several years. The chair-manufacturing business is new in Quiroga and consequently is not taxed. The law states that a license is required to open any sort of commercial establishment and any kind of diversion or public spectacle; to build, rebuild, or repair any urban structure; etc. Examples of rates are: saloons or *cantinas*, \$50 to \$300; mercantile and industrial businesses, \$3 to \$75 (with a 20-percent surcharge to be open outside of "normal" hours); for each billiard table, \$1 to \$5 and for each pool table, \$0.50 to \$3; gasoline pumps ("service stations"), \$5 to \$25; and traveling musicians, \$2. Most taxes are \$5 or \$10. The specific quotas are assigned by the municipal president and treasurer. The foregoing taxes are paid annually.

8. *Derechos de certificados*.—This is a tax on certificates and certified copies. The basic tax is \$2.50 for the first page and \$1.50 for each page thereafter, with 50 percent additional for copies. Anything from the civil register costs the same as the above mentioned plus \$1 a sheet for the specially stamped paper which is obtained from the State accountant's office. The treasurer must make a monthly report on the movement of the stamped paper. Matters pertinent to Indian and agrarian organizations are exempt from charges.

Three categories are listed as imposts or *impuestos*. These are:

9. *Impuesto sobre compra-venta de semovientes*. The term *semoviente* means "That which moves of itself," or livestock. Every animal sold must be accompanied by a title with the seal of the *ayuntamiento*. The municipal president must keep a book with the record of all these sales entered. The legal tax rate for the sale of each head of livestock is: *ganado vacunar* (oxen), *caballar* (horses) or *mular* (mules), \$1; *ganado asnal* (asses), \$0.75; *ganado porcino* (hogs), \$0.60; and *ganado lanar* (sheep) and *caprino* (goats), \$0.30. In case the animals belong to improved or pure breeds (*ganado de raza fina*) the rates are doubled. The income from this impost commonly rates fourth or fifth.

10. *Impuestos sobre diversiones públicas*.—These imposts are applied whenever there is an admission charge. The rates set by law have considerable amplitude, but the municipal president and treasurer are allowed to determine the specific rates. In general in Quiroga the charges are \$3 to \$4 for each show or performance. The local cinema has paid \$3 weekly, although the law provides that the charge be 6 to 12 percent of the face value of the tickets sold. Other amusements that obtain in Quiroga from time to time are dances (not including private and free public dances), traveling circuses and carnivals, theatricals, puppet shows, and roulette wheels—for which there are daily or performance charges. Whenever admission is charged, money may not be received at the door; tickets, stamped with the seal of the municipal treasury, must be purchased previous to entrance, and an inspector is present to see that the tickets are presented and torn. Among other amusements where the tax is a percentage of the value of the tickets are boxing matches, bull fights, and *jaripeos* (a rural combination of a rodeo and usually bloodless bull fighting), and various ball games, such as soccer and basketball. Theoretically a percentage of the bets won is collected at horse races and cock fights. In licensed poolrooms and saloons there is a monthly tax collected on each pool and billiard table, and on each domino owned by the house. Electrically operated musical machines (juke boxes) pay \$10 to \$60 monthly.

11. *Impuestos sobre instrumentos notariales*.—Any type of written material (*escritura*) that is authorized by a notary or tax collector carries an impost of \$2 if the values involved do not exceed \$10,000, and \$0.50 for each additional \$1,000. If the notarized paper is of a private nature or does not involve a statement of value, the charge is \$1 a page. The notarized papers in Quiroga average an impost of \$2.

The 11 headings given above and the following 1 constitute the 12 branches into which municipal accounting normally is divided. Nine of the above-listed taxes (all but *mercados* and *panteones*) have a 10 percent additional surcharge which goes to the State for the public roads fund. There is also another surcharge of 5 percent, which is a contribution to the Federal Government, applied on the nine items mentioned previously and also on municipal fines or *multas*.

12. *Productos de ventas y rentas de bienes inmuebles del municipio.*—This category includes the income derived from the sale (with permission of the State congress) or rent of municipal buildings and lands. There was no such income during the period 1943–45. Although not strictly covered by the title of the category, the law on the subject also covers the money derived from the sale of confiscated firearms and other weapons, lost-and-found items, abandoned and strayed animals, etc.

Minor headings, which represent specialized income from a number of the categories given above are: *Rezagos* (unpaid remainders or overdue taxes), *recargos* (surcharges for those who do not pay on time), and *multas* or fines which are applied for a considerable list of private and public offences against the municipal *Ley de Hacienda*. Also in this group of *aprovechamientos* are gifts, indemnities for destroying public property, income from the sale of ownerless lands, and income from the sale of ownerless animals (*bienes mostrencos*). The municipal president must send a list of all impounded lost or strayed animals to all of the bordering municipalities. Then, after a wait of several weeks, the animals must be appraised, a list must be published, and finally the animals are auctioned off. One can always find a number of such lists, from the local and neighboring municipalities, posted in the municipal palace. Actually, there is very little income in Quiroga from any of the items mentioned in this paragraph excepting fines.

Very important sources of income, listed under *Participaciones*, are the Federal and State subventions and sums remitted from certain taxes collected within the municipality. A varying and small amount is remitted from Federal taxes on sales places of alcohols (*expedios de alcóholes*), mining properties, lumbering and other *explotación forestal*, generation and consumption of electrical power, gasoline sales, etc. In Quiroga this Federal remittance is chiefly on forest products. The bulk of the *participación* is provided by the return of 60 percent of what the State has collected within the municipality through its general impost on commerce and industry. This impost is collected by the local State tax office, and the 60 percent is turned over to the municipal treasurer on the fifteenth and last day of each month. When income from this source is not sufficient to

round out the municipal budget the State congress may make an additional grant. *Participaciones* commonly rank third among municipal sources of income.

The total municipal income recently (1945 and 1946) has amounted to about \$15,000 annually. Approved annual budgets usually are less than the actual receipts and expenditures. Total receipts for the years 1941 to 1944 are shown in table 22. The figures shown in table 22 do not include the 10 percent State and 5 percent Federal surcharges. An interesting basis for comparison with other municipalities in Michoacán is provided by a circular issued May 26, 1945, by the State general accountant's office. This circular gives the 1944 income of all municipalities broken down by categories. Incidentally, the 1945 circular credits Quiroga with \$2.40 more in *mercados* and \$5 more in *panteones* than indicated in the local Quiroga records. Also, nothing is listed for Miscellaneous, but *instrumentos notariales* are credited with an additional \$115. Although the Federal 5 percent surcharge is not included, Quiroga is credited with the State 10 percent surcharge amounting to \$834.12, for a total of \$14,511.22 income in 1944. We have selected for comparison, out of the 102 municipalities in Michoacán, the largest and smallest in population (as of the 1940 census), all of the neighboring *municipios*, and several others of interest in the region (table 23).

Comments on table 23: Quiroga is almost the median municipality in population (1940). Of the 17 other categories, Quiroga is in better position than her population rank in 10: Aguas, 11; mercados, 24; abasto, 31; diversiones, 37; certificados, 40; panteones, 41; State 10 percent, 44; total income, 45; notarized paper, 45; and State participation, 48. While we were in Quiroga we did not take sufficiently detailed notes. The “?” indicates a position not determined by us, within the following limits: *abasto*, 52 to 90; *mercados*, 54 to 74; *aguas* not in the top 12 of 38 municipalities that have water changes or else without a water charge (“*” means definitely no water charges in 1944); *registro civil*, 66 to 84; *panteones*, 21 to 102 or no charges; *fierros*, 66 to 83; *licencias* 21 to 94; *certificados*, 10 to 94; *semovientes*, 67 to 100; *diversiones*, 40 to 82; *instrumentos notariales*, 49 to 58; *multas*, 18 to 89; miscellaneous, 20 to 102; State, 10 percent, 52 to 87; Federal

TABLE 22.—Total municipal income 1941-44 in Quiroga

Tax category	1941	1942	1943	1944
1. Derechos de abasto.....	\$3,353.45	\$3,914.00	\$2,775.24	\$2,533.34
2. Derechos de mercados.....	1,729.00	1,700.30	1,740.70	2,803.60
3. Derechos de aguas.....	955.50	1,033.50	1,099.50	1,296.50
4. Derechos del registro civil.....	308.00	205.00	304.00	387.00
5. Derechos de panteones.....	181.00	139.00	175.00	233.00
6. Derechos de . . . fierros.....	459.00	499.05	494.00	1,045.00
7. Derechos de licencias.....	212.77	269.50	274.00	490.15
8. Derechos de certificados.....	126.00	139.00	358.50	358.85
9. Impuestos . . . semovientes.....	744.00	878.75	887.75	1,776.00
10. Impuestos . . . diversiones.....	73.25	97.50	450.00	465.50
11. Impuestos . . . instrumentos notariales.....				97.00
12. Productos . . . del municipio.....	135.90	44.50		
Miscellaneous.....	51.00	42.00	116.00	115.00
Multas.....	495.25	357.80	687.60	95.10
Participaciones 60 percent.....	1,586.96	1,951.50	1,637.71	1,878.16
Participaciones forestal.....			400.06	95.50
Total.....	10,451.08	11,271.40	11,400.06	13,669.70

TABLE 23.—Comparison of various municipios¹

Category	Morelia	Pátzcuaro	Cuitzeo	Zacapu	Escalante	Cueneo	Acutzeo	Huaniqueo	QUIROGA	Nahuatzen	Chucándiro	Tzintzuntzan	Erongarkuaro	Cherán	Coahuayana
1940 population.....	1	8	17	18	23	24	36	49	51	56	69	84	88	97	102
Total income.....	1	5	58	19	27	55	29	73	45	92	71	102	84	96	99
Abasto.....	1	8	42	14	24	63	23	(?)	31	(?)	(?)	102	89	86	98
Mercados.....	1	17	(?)	10	49	(?)	51	85	24	93	50	81	(?)	84	(?)
Aguas.....	(*)	(*)	(?)	7	(?)	(?)	(*)	(?)	11	(?)	(?)	(?)	(*)	(*)	(?)
Registro civil.....	1	7	44	19	43	47	15	60	64	(?)	63	94	90	85	101
Panteones.....	1	5	17	(?)	(?)	(?)	(?)	(?)	41	(?)	(?)	(?)	(?)	(?)	(?)
Fierros.....	1	32	(?)	40	13	8	42	17	63	(?)	31	84	64	92	(?)
Licencias.....	1	4	(?)	(?)	(?)	(?)	(?)	(?)	60	(?)	(?)	98	(?)	(?)	(?)
Certificados.....	1	7	(?)	(?)	(?)	(?)	(?)	(?)	40	(?)	(?)	95	(?)	(?)	96
Semovientes.....	2	17	(?)	43	35	47	16	50	66	54	53	102	(?)	(?)	(?)
Diversiones.....	1	5	(?)	9	21	36	(?)	(?)	37	(?)	(?)	(?)	(?)	(?)	(?)
Instrumentos notariales.....	1	6	33	11	69	29	27	(?)	45	83	71	59	66	48	102
Multas.....	11	7	(?)	(?)	(?)	(?)	(?)	(?)	90	(?)	(?)	100	(?)	99	(?)
Miscellaneous.....	1	5	(?)	19	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)
State 10 percent.....	1	5	(?)	13	30	43	28	(?)	44	(?)	(?)	102	94	96	98
State participaciones.....	1	5	37	11	23	35	32	80	48	84	83	97	62	99	102
Federal participaciones.....	11	23	(?)	(?)	10	---	22	---	62	---	---	---	(?)	(?)	(?)

¹ The figures represent rank (out of 102) for the various subjects and headings listed.

participación, 34 to 59. The leaders (—) indicate no income from *mercados*, *diversiones*, miscellaneous, and Federal participation. The mean income per capita in the Municipio de Quiroga is \$1.67, as compared with \$6.09 in Morelia and \$0.47 in Tzintzuntzan.

We were unable to obtain a complete and coherent picture of the municipal expenditures. Regularly approved salaries totaled \$1,115.64 a month in 1945. This would amount to \$13,387.68 a year. The 1945 monthly expenditures for salaries and wages can be compared with the 1870 annual expenditure of \$636, and \$714 for the year 1880. Other expenses (*gastos*) are said to be around \$4,000 a year. However, the combined expenses and salaries for 1944 amounted only to \$12,380.25. Probably salaries and wages do not

run at the maximum allowable during many months of the year. Some of the more important items under *gastos* are: \$1,000 or more for public works (roads, bridges, water supply, etc.); \$720 for town lighting; \$460 for "extraordinary" and social expenses; \$270 for feeding the municipal mule (used by the municipal street cleaner and carter); \$190 for office supplies; \$150 for installation of the new *ayuntamiento*; \$100 for patriotic festivals; \$50 to feed prisoners; and \$30 for election expenses. The enumerated items amount to about \$3,000, unless public works run higher than \$1,000. Total expenditures for salaries and expenses may run between \$900 and \$1,250 a month. This can be compared with monthly figures of about \$136 in 1872, \$153 in 1874, \$177 in 1875 (after Tzintzuntzan had been incorporated), and \$241 in 1880. Other comparative figures include: income of \$1,526.62 and expenditures of \$1,840.74 in 1868-69; income of \$3,501.27 and outgo of \$3,235.57 in 1885-86 (in this fiscal year Quiroga ranked 15th out of 75 municipalities in income); and budgets of \$5,076 in 1891-92, \$6,665.25 in 1895-96, \$10,560 in 1943, and \$10,900 in 1944. Considering the change in the purchasing power of the peso since the 1880's (it now takes \$5 to \$15, or an average of \$9 to purchase what \$1 would buy of such commodities as corn, wheat, and beans in the 1880's), municipal government is cheaper now than it was some 50 to 70 years ago, both absolutely and per capita.

MUNICIPAL COMMISSIONS

For at least the past 80 years, commissions or committees have existed to supervise and advise on the principal branches of municipal business and government. The membership varies from one entirely composed of members of the *ayuntamiento* to one entirely non-municipal. At present there are 10 commissions, commonly composed of a president and 3 other members or *vocales*. The business of the various commissions is a good index to the matters that most concern the active citizens of Quiroga. Some commissions of the past have ceased to exist because of changed conditions; e. g., commissions on pawnshops, lodgings (important when Quiroga was a great center for *arrieros* and animal convoys), jails, and weights and measures (very important before the metric system became mandatory and common). Under varying names all but one of the present commis-

sions (*Caza y Pesca* or Game and Fish) have been in existence for 50 or more years. The list consists of *Hacienda* (Finance), *Alumbrado y Ornato* (Lighting and Decorations), *Educación*, *Carreteras y Caminos* (Highways and Roads), *Caza y Pesca*, *Abasto y Mercados* (Slaughterhouse and Markets), *Aguas* (Water supply), *Espectáculos Públicos* (Public Entertainment), *Salubridad* (Health or Sanitation), and *Bosques y Arboledas* (Woods and Plantations). As of April 24, 1945, a *Junta de Mejoras Materiales* (Board of Public Works) was organized which has replaced the former *Comisión de Obras Publicas*. The junta has taken over all business formerly associated with *Aguas* and most of that of *Alumbrado y Ornato*, but it is especially concerned with the deficient water supply. The composition of the junta in 1945 and 1946 was: Dr. Arturo H. Rascón (president), José Medina Gaona (secretary), Rafael Villicaña (treasurer), and Ramón Fuentes Medina, Antonio Castellanos (the local collector of State taxes), and the incumbent syndic. The treasurer of the junta now collects the water-use tax, formerly collected by the municipal treasurer. The municipality itself supplies all of the public services and utilities excepting education and health (which are Federal) and electricity (which is purchased) although there is Federal and State aid for such items as roads.

MUNICIPAL JUSTICE

The lowest order or unit of justice in the State of Michoacán is the *alcalde* or judge in the *tenencias* and the two *jueces menores* (formerly *alcaldes* and *jueces de paz*) in the municipal capital. Formerly the *alcaldes* or *jueces menores* were locally elected by direct popular vote and were members of the *ayuntamiento*, but they have ceased to be a part of the *ayuntamiento* and they are no longer elected. Some time in January the new *ayuntamiento* submits a slate of four names to the State supreme court. Normally the court will approve the slate, and will designate two as proprietary judges and the other two as substitutes. The two judges alternate monthly in serving in the local court or *juzgado menor*. Usually the same judges will be reappointed for a second year. In 1943 and 1944 the proprietary judges were Efrén Chagolla Campuzano and Tomás García Torres, although the substitutes, Gilberto Romero and José Rivera, handled the

court in 1944. The judges in 1945 and 1946 were José Calderón and Indalecio Chagolla. The office of the local court is on the upper floor of the municipal building. The records and the paper work there are taken care of by the *secretario del juzgado* whose salary is paid by the *ayuntamiento*. The judicial archives in Quiroga consist of: Copies of the *Ley Orgánica de Tribunales*, the *Constitución Política del Estado de Michoacán de Ocampo*, penal and civil codes, scattered laws and edicts of the State congress (including some for 1826–29), and scattered numbers of the *Periódico Oficial de Michoacán*. Also there are papers pertaining to criminal cases dating back to 1764, intestate judgments for 1880, and registers and correspondence concerning civil and criminal cases, prisoners, sentences, inventories, etc., for scattered years. Unfortunately, we did not have the time to study the records or determine the frequency of different types of crimes. Apparently most of the cases are civil, or involve offences against the public order such as committing a nuisance, disorderliness, rape, theft and robbery, attacks resulting in wounds, homicide, and abductions. Cases may be tried in this court which do not result in fines of more than \$300 or jail sentences of more than 6 months. Cases may be appealed to the court of first instance in Morelia (to which judicial district Quiroga belongs), but apparently many cases are carried to the *juzgado de primera instancia* in Pátzcuaro. Pertinent documents or *comprobantes* in civil cases pertaining to real estate are filed with the local office of State tax collection.

STATE GOVERNMENT

The State government (governor or congress) may and often does intervene in the municipal affairs, especially with respect to the election of *ayuntamientos*. The records indicate that in addition to the *ayuntamientos* of 1935–37, there were other impositions as in 1930, 1889–90, 1875, 1870, etc. We have already outlined the financial relations between the municipality and the State government. The ultimate court of legal appeal is the State supreme court in Morelia. There is direct public election of State congressmen every 3 years and of the State governor every 6 years. Michoacán is divided into 11 State electoral districts, presumably one for about every 100,000 people. At the moment, and for a number of

years, Quiroga has been in the second electoral district of which Pátzcuaro is the center or most important community. Usually the State congressman or *diputado* from the second district is a native of Pátzcuaro. Very often he will suggest to the *ayuntamiento* and political leaders of Quiroga whom he would like to have elected president or syndic of the *ayuntamiento*, or someone whom he would like appointed secretary of the *ayuntamiento* or president of the electoral council. The legislature of Michoacán is unicameral, and consequently there are no senators. The elections for *diputado* and governor are carried out locally much as are the municipal elections, excepting that the election day is on the first Sunday in June, and the State congress constitutes the final electoral court to judge the validity of the elections.

There are only two regular State offices in Quiroga, that of the State telephone network (housed in the municipal palace and attended by the scribe of the civil register) and the State tax office or *Receptoría de Rentas*. Since the State owns no building in Quiroga, the tax office moves around with the tax collector and usually is a front room in a rented house. Since the State taxes collected by this office are chiefly on real estate the details of the office's work are given with the discussion of land ownership.

FEDERAL GOVERNMENT

The Federal Government is directly represented in Quiroga only by the personnel of the post office and by the Federal stamp agent. The local post office is a full *Administración de Correos* (to which is attached the *sub-administración* in Tzintzuntzan). It is housed in a rented office a few yards from the Municipal Building. The personnel consists of the postmaster or *administrador de correos*, one or two assistants, and a *cartero* or mailman. The postmaster for the past several years has been our good friend Don José Medina Gaona. The most widely applied Federal tax is the stamp tax which is in the form of stamps that must be attached to a great variety of legal, commercial, and industrial papers such as invoices, receipts, each page of account books and ledgers, etc. The local representative or *agente del timbre* maintains the municipal agency or *agencia del timbre* (which depends from the regional office in Pátzcuaro) in his home, which also contains a

store, and which is located on the Calle Nacional nearly opposite the post office. Although Manuel Robles Fuentes is the appointed agent, Francisco Fuentes and Francisco Fuentes Rojas have performed the duty for many years. Probably we should include the two Federal primary schools and their personnel. Since the revolution all the public schools in Quiroga have been maintained by Federal funds. There is a Federal coeducational primary school in a rented building on the Calzada Ramón Corona half a block from the principal plaza, and there is a Federal rural primary school in the former chapel of San Miguel in the Calvario *barrio* near the northern outskirts of town. This latter school is primarily for the children of the *Comunidad Indígena* and of the *ejidatarios*. The personnel consists of 10 teachers. These Federal primary schools are administered from the Federal educational office for the State of Michoacán in Morelia.

Naturally, there are dozens of other ways in which the Federal government, its laws and its organizations, affect the municipality of Quiroga. According to the constitution and definitive decrees, the wealth of the subsoil, Lake Pátzcuaro and its affluent streams, and other natural resources, belong to the Federal government. Since most of the municipality of Quiroga which borders Lake Pátzcuaro falls within the lands of the three western dependent pueblos, there are no navigation lights or other Federal installations on the lands of Quiroga proper. Formerly Quiroga owned a boat landing to which periodic visits were made by lake steamers and other vessels, but this has been abandoned so completely that it is now impossible to even locate the former site of the *muelle*. The forests and their products are subject to Federal control and tax, but this is handled by remote control out of Morelia and Pátzcuaro. There are no mines of minerals which would come under Federal control. The Federal *Secretaría de Comunicaciones y Obras Públicas* controls not only the post office and the navigation of the lake, but it has contributed much to the development of the main oiled road which passes through Quiroga from Mexico City and Morelia to Guadalajara, and also the oiled road which branches south at Quiroga to Pátzcuaro and southward. Federal, State, and municipal funds have been involved in the development of the Quiroga road network. However, there is no

formal State or Federal road office in Quiroga, although occasionally a sectional road boss and a small group of construction or repair workers will live in Quiroga and maintain some machinery there. Federal highway motor patrolmen commonly ride through Quiroga at least once a day, but there is no local office. Such Federal bureaus as those of Potable Waters, Irrigation, Electricity, and Game and Fish have operated in Quiroga from time to time, but only the *Comisión Federal de Electricidad* has left much mark—in the shape of the power line which brings electricity to Quiroga from a plant near Tacámbaro. The Quiroga *ejido* is an important manifestation of the Federal government, but all the members and administrators are local. The agrarian set-up is considered under Land Ownership and Agriculture. Quiroga is located within the 21st military zone with headquarters in Morelia, but it has been many years since there was a Federal garrison or military detachment in Quiroga.

SUMMARY

The municipality of Quiroga constitutes the basic government of our area, and it is responsible only to the State government. In such items as taxation and elections Quiroga is in the Pátzcuaro district, but in justice and in practically all other State and Federal regional groupings Quiroga is dependent upon offices in Morelia. The comparative nearness of Morelia (27 miles) which is not only the State capital but also the largest city in the State, has tended to offset the proximity of Pátzcuaro (15 miles) and its ancient prerogatives. This has been accentuated by the fact that good road communication existed between Quiroga and Morelia earlier than between Quiroga and Pátzcuaro. The median position of Quiroga among the municipalities of Michoacán in point of population would indicate that the functioning of government that we have outlined for Quiroga should be somewhat typical of municipalities in this part of Mexico.

ECONOMY

The basic economy of Quiroga and its ranchos is agriculture, and this has been the case since prehistoric times. In second place come the handicrafts, especially the making of various wooden goods, such as decorated bowls and chairs. The remainder of the economic picture is filled out by services such as those rendered by merchants, butchers, cobblers, carpenters, masons, barbers, et al. Throughout the colonial period there is mention only of cultivating crops, raising livestock, and making various objects of wood. In Martínez de Lejarza's (1824) description of Michoacán in 1822 the economy of Cocupao is given as the raising of maize and wheat, and the making of *bateas* and decorated chests. During the nineteenth century the manners of making a living began to diversify because of acculturation (the shift from an Indian to a mestizo manner of living), increase in population and wealth, and an important transportation business (chiefly pack trains and traveling merchants). Although wood-working declined, more valuable products came from the rum distilleries and flour mills that were established during the second half of the nineteenth century. The pack trains were nearly put out of business by the railroads that penetrated the region 1883-1914, and the Madero

Revolution and succeeding disturbances caused a decline in all forms of economy during the period 1910-30. The surfacing of the through highway, and its spur to Pátzcuaro and Tacámbaro, has revived the importance of Quiroga as a transportation center, and the entire economic picture has improved—from woodwork for tourists to agricultural products.

AGRICULTURE

Agriculture in the Quiroga area comprises the cultivating of plants, the raising of animals, and the gathering of forest products. The latter group has been included because the bulk of the forest products (firewood, charcoal, wood for *bateas*, wild fruits, thatching and packing materials, etc.) are gathered and elaborated by the farmers and their families—especially in the off-seasons when they are not busy with planting, cultivating, or harvesting the regular crops. The plants utilized and cultivated fall into four groups: fruits and vegetables which are raised on the *solares*, fruits and vegetables which are raised away from the house plots but within the precincts of town, field crops, and wild plants of the woods and forests. The animal economy comprises animals kept in and near the house (tamed

animals and pets, poultry, and swine), animals grazed in large numbers (cattle or oxen, sheep, and goats), and work animals (equines and work oxen). Since there is no fishing, little hunting, no mining, and only a little quarrying of stone and digging of earths, the agricultural pursuits account for the utilization of practically all of the area outside of the settlements. As mentioned previously, about 1,100 hectares are cultivated and 2,756 hectares comprise the pastures and woodlands.

The number of individuals who are directly connected with agriculture in Quiroga and its ranchos is somewhat difficult to figure. Of the 291 persons who own the 475 parcels of rural property in the area (not counting the *ejidatarios*), not more than 170 are resident farmers and the remainder are absentee landlords or are local merchants and businessmen who only visit their holdings periodically. The number of actual farmers, i. e., those who do farm labor (owners, members of the family, share croppers, hired laborers), varies greatly from season to season and from one year to another. Consequently, census figures give only an approximation of the facts. The situation is further confused by the following factors. The terminology is quite uncertain. There is no doubt about a farm owner when he states that he is an *agricultor propietario*, but many owners are content to classify themselves as *agricultor* which means merely farmer or agriculturist. Most of the share croppers or *medieros* also call themselves *agricultores*, as do some of the landless day laborers. Sometimes the term *campesino* (countryman or rustic) is used as a synonym for *agricultor*, but commonly *campesino* is used for a landless rural laborer, a *mediero*, or an *ejidatario*. In Quiroga at least half of the *ejidatarios* (collective farmers on the *ejido*) term themselves simply *batellero* (one who cuts down trees and works out the crude wooden bowls known as *bateas*) since this was their main occupation before receiving the *ejidal* grant, and it is still the chief means for supplementing the inadequate income derived from the *ejidal* farms. In spite of some confusion, we can take for granted that practically all *agricultores*, *campesinos*, and *ejidatarios* are primarily farmers. A quite variable group comprises the minor males of a farming family who may be known as farm laborers (*jornalero del campo*), *campesino* or *agricultor*, or merely as *agricultor-ayuda familia* (farmer family

aide). In some families boys as young as 7 years are included in the category of family helper, although commonly the ages involved are from 12 to 18. Unfortunately, neither in the census of 1940 nor in our census of 1945 were the returns in this category either consistent or comparable. Finally, there is the large group of day laborers known by such terms as *jornaleros* (day laborers), *peones* (literally a footman or infantry soldier, now applied to manual laborers and any unskilled laborers), *trabajadores* (workers), *labradores* (laborers), *braceros* (manual laborers), etc. This large group of unskilled manual laborers provides a labor pool whence come workers on the highway, in the chair factories and flour mill, on the farms, etc. During the busy farming seasons (plowing, planting, cultivating, and harvesting) the majority of these *jornaleros* become *jornaleros del campo*. Although the majority of the laborers who work on the farms some part of the year term themselves *jornaleros del campo*, many of them will give their current occupation at the moment of the census and may show up as carpenters (rough carpenters in the chair factories), water-carriers (*aguadores*), gatherers of firewood (*leñadores*), makers of adobes (*adoberos*), road workers (*peones de camino* or *carretera*), and general assistants around various town enterprises (*mozos*). In view of this situation, undoubtedly the number of *jornaleros del campo* given in table 24 should be increased considerably. However, the stated number of farm laborers may come close to the equivalent number of full-time workers. The farm picture is still incomplete, however, since the women, girls, and young boys often participate in various aspects of the farm labors such as planting maize, beans, and pumpkins, placing fertilizer in the hills of corn and beans, harvesting beans, gleaning, herding livestock, caring for the poultry and swine, etc. Also, when the women are not actively engaged in farm pursuits they often are decorating the *bateas* (in the case of the women of El Calvario), making *pulque* or preparing the roasted *maquey*, preparing and carrying meals to their menfolk in the fields, gathering wild *tejocote*, *capulín*, and cactus fruits, etc., as well as looking after their regular household chores. Actually the entire population of the ranchos and of the farming families in Quiroga above the ages of 7 or 8 should be included in the agricultural population of the area. Table 24 gives some

figures on agricultural population in the Quiroga area (Villa de Quiroga and its ranchos) in 1940 and in 1945.

TABLE 24.—General and agricultural population in Quiroga

Population	1940	1945
General:		
Total population.....	3,899	4,159
Total males.....	1,948	1,996
Adult males.....	851	982
Total number of families.....	871	931
Total number of households.....	755	797
Agricultural:		
Agricultores propietarios.....	139	170
Agricultores-ayuda familia.....	125	130
Ejidatarios.....	31	68
Agricultores, campesinos.....	141	112
Jornaleros del campo.....	185	122
Total.....	661	602

The decrease registered between 1940 and 1945 in the last two categories represents primarily the shift of laborers into the building trades and chair manufacturing, and the absence of some as *braceros* in the United States. The increase in number of landowners is fictitious, since the 1940 census grossly understated the number which we increased after consulting the tax rolls. The increase in number of *ejidatarios* is due principally to the fact that we listed all official members of the *ejido*, including those who gave *batellero* as their occupation.

HISTORY OF CROP FARMING

The principal source of agricultural income is from the farming of field crops. This was not the case with the pre-Conquest Tarascans who had no draft or pack animals, used the digging stick and hoe instead of a plow, and lacked a number of the important field crops which were introduced by the Spaniards. We know from archeologic evidence and the reports of the sixteenth century that the Tarascans planted small fields near their houses and cultivated these fields with such attention to each individual plant that it was more horticulture than agriculture or field farming. They had neither the plants nor the equipment for large fields and broadcast sowing. It is probable that at present Old World plants (of all types) occupy a greater acreage and yield a more valuable production than do the native plants. The principal native plants were as follows (the last italicized name within parentheses is Tarascan):

Maize (*maiz*, *tsiri*), *Zea mays* L., which was the chief source of starch (in tortillas, tamales, parched corn, *atoles*, *pinoles*, hominy, etc.) and for sirup and drink (juice from the cane was boiled down to a sirup and also was fermented, and the grain was made into a beer). The Relación de Michoacán also mentions that the Tarascans irrigated some of their cornfields, and had three kinds of corn—colored (probably yellow and red), spotted (*pintado*), and white.

Amaranth (*bledo*, *quelite*, *alegría*, *huautli*, *pari*), *Amaranthus paniculatus* L. var. *leucocarpus* Saff., which was an important breadstuff second only to maize, and probably was used locally before the introduction or cultivation of maize.

Goosefoot (*bledo*, *quelite*, *xacua*), *Chenopodium* spp. Several of the chenopods were collected wild to be used as pot herbs (greens and for flavoring) and probably some of the *bledos de muchas maneras* were cultivated to a slight extent.

Kidney bean (*frijol*, *thatsini*), *Phaseolus vulgaris* L. Red and black beans were raised in abundance and were used in a variety of ways including in tamales.

Pumpkin (*calabaza*, *melón*, *puruan*), *Cucurbita pepo* L. The Spaniards immediately after the Conquest used *calabaza* and *melón* as synonyms for the pumpkin, although some of the more precise restricted *melón* to edible pumpkins and used *calabaza* for inedible pumpkins and the calabash gourd (*Lagenaria*). Phraseology was so loose that we cannot be certain as to what cucurbits in addition to the *Cucurbita pepo* were present. Probably the calabash gourd and also the musky pumpkin *Cucurbita moschata* Duch. and the fig-leaved pumpkin or *chilacayote* (*Cucurbita ficifolia* Bouché) were cultivated by the prehistoric Tarascans.

Chile pepper (*chile*, *azi*, *cauás*), *Capsicum frutescens* L. The Spaniards at first used the West Indian term *azi* rather than the Nahuatl *chilli*. The Tarascans had green, red, and yellow chiles which were used as sauces and as filler for tamales.

Agave (*maquey*, *amole*, *acamba*), *Agave* spp. The century plant or agave was cultivated in a number of species, and was utilized for sirup, wine, food, fiber, etc.

Tobacco (*tabaco*, *picietl*, *andumucua*). Several species of *Nicotiana* were cultivated (*N. tabacum* L., *N. mexicana* Schlecht., *N. rustica* L.) and were used for smoking, chewing, drinking, incense, and medicine under such names as *andumucua*, *shasharacua*, *sinchacua*, and *itzutacua*. Michoacán probably has more prehistoric pipes than any other state in Mexico. The last three Tarascan names actually refer to the implements used.

Tomato (*jitomate*, *xucupara*). We cannot be certain how the writer of the Relación de Michoacán was using the Mexican word *tomate*. Literally *tomatl* refers to the fruit of a large number of solanums of the genera *Solanum*, *Saracha*, *Lycopersicum*, *Nicandra*, and *Physalis*, and *tomate* is most commonly used in the unmodified form for the husk-tomato of the genus *Physalis*.

Cotton (*algodón*, *xurata*), *Gossypium* spp. Although cotton was woven in the Pátzcuaro Basin, the evidence indicates that it was brought up from the *tierra caliente* to the south.

In addition to the above plants (all of which were mentioned as cultivated, in the *Relación de Michoacán*), there were undoubtedly a number of other cultivated plants of lesser importance. From the Gilberti dictionary of 1559 and other records of the first years of Spanish occupation we know that there were cultivated in Michoacán such plants as: Chayote (*apupu* or *apupio*), *Sechium edule* Swartz; several species of cacti; custard apple (*chirimoya*, ate) *Annona cherimola* Mill.; white zapote (*zapote blanco*, *uriata*), *Casimiroa edulis* Llave and Lex.; avocado (*aguacate*, *cupanda*), *Persea gratissima* Gaertn. or *Persea americana* Mill.; Mexican wild cherry, (*capulín*, *xengua*), *Prunus capuli* Cav. The botanical evidence would add such plants as the many-flowering bean (*Phaseolus multiflorus* Willd.), several *frigolillo* beans (*Canavalia* spp.), jícama (*Pachyrhizus angulatus* Rich.), chia (*Salvia chia* Fernald), guava (*Psidium guajava* L.), Mexican hawthorn (*Crataegus mexicana* Moc. et Sessé), etc.

Within a few years after the Conquest the Spaniards introduced a great many Old World plants, according to the evidence of the various censuses, *relaciones geográficas*, and the reports of Hernández and Ponce—which cover the period 1529 to 1586. Some of the introductions were made by the conquerors and *encomenderos* (especially of the more valuable crop plants such as wheat, barley, horsebeans, and sugarcane); but the majority were made by the friars and regular clergy (especially of fruit trees, vegetables, flavoring herbs, and ornamentals). Definitely by 1586, and in most cases much earlier, the following Old World plants were being cultivated in northern Michoacán: Onions, leek, garlic, water cress and garden cress, asparagus, artichoke, lettuce, endive, cabbages, mustard, radish, turnip, purslane, parsley, carrot, beet, eggplant, cucumber, sorrel, horsebean, chickpea, lentil, common peas, wheat, barley, flax, hemp, anise, cumin, licorice, sweet marjoram, pennyroyal, peppermint, coriander, apple, apricot, banana, cherry, citron, date, fig, grape, lemon, lime, mulberry, nectarine, olive, orange, peach, pear, plum, pomegranate, quince, sugarcane, walnut. The most important cultivated plants in the Pátzcuaro Basin during the sixteenth century (judging only from frequency of mention) were: Maize, wheat, and barley among the cereals; beans, pumpkins, and chile peppers among the vegetables; and quinces, peaches,

apples, figs, and *magueyes* among the fruits. Among other plants mentioned specifically for the Tzintzuntzan-Cocupao-Santa Fe area were olives, walnuts, citrus fruits, mulberries, cactuses, lentils, flax, hemp, and licorice. It is noteworthy that rye, oats, millets and sorghums were not mentioned, since these cereals have never been of importance in northern Michoacán, and are practically lacking today in the Pátzcuaro Basin. Potatoes (known in the wild state) probably were not introduced from South America until the end of the sixteenth century, and are still relatively unimportant. During the sixteenth and seventeenth centuries a number of other plants were introduced from South America, among which were several that reached the Pátzcuaro Basin: *Oca del Perú*, also known as *papa de castilla* and *papa colorada* (*Oxalis tuberosa* Molina); the true squash or *calabaza de Castilla* (*Cucurbita maxima* Duch.); and a number of ornamentals. Although there were a few later plant introductions, no important economic plant was involved. In fact, the plants already present at the time of the Conquest and those introduced within the next 30 years (1522–52) comprise more than 99 percent of the agricultural production (by area planted, by volume and weight produced, and by value) in the Quiroga area. The leading crops at present are: (1) Field crops—maize, wheat, *habas*, kidney beans, barley, cucurbits, and alfalfa; (2) garden crops—cucurbits, cabbages, lettuce, chiles, tomatoes and husk tomatoes, and onions; (3) tree crops—peaches, citrus fruits, figs, apricots, white zapotes, avocados, hawthornes, and *capulines*; (4) shrub crops—agaves and cactuses.

SOILS AND EROSION

In general, the soils of Quiroga are poor zonal soils formed under mesothermal humid conditions from extrusive rocks. Specifically, subtropical reddish-brown clays and loams formed from basaltic rocks predominate. The bedrock is nearly everywhere basalt flows, breccias, and tuffs, excepting the small areas of andesites chiefly in the uplands. A mesothermal humid climate prevails over all of the Quiroga area, characterized by a total precipitation of more than 1,000 mm. concentrated in the summer months, a moderate range of temperature, infrequent temperatures below freezing and moderate winds and evaporation. There is an in-

crease in precipitation and decrease in temperature from the lake shore to the top of Tzirate. Since mountains, hills, and slopes with a gradient greater than 3 percent occupy the majority of the area, there is rapid run-off, good drainage, considerable soil creep, and much denudation and erosion. Consequently, at present, over large areas the soil cover is thin, and frequently the A horizon has been stripped off completely. Most of the soils are residual. Next in area are the alluvial soils of the lake plain and the upland depressions or *joyas*. At one time there were extensive sheets of wind-deposited volcanic dust and fine sand, but at present the older volcanic "ashes" and sands (converted to tuffs and sandstones) are part of the basal complex underlying the residual soils. The more recent "ashes" and sands commonly are covered with thin veneers of water-transported materials. Since March of 1943 there has been deposited a considerable amount of "ash" from Parícutin. No one has measured the thickness of the ashfall in the Quiroga area, but judging from various local accounts and the deposits noted on the vegetation in the winters of 1944-45 and 1945-46 (before the rains) it must have totaled quite a few millimeters. Furthermore, many of the farmers around Quiroga have remarked upon the increased fertility of the soils since 1943. Colluvial soils have a spotted minor distribution.

Erosion has been very severe in the Pátzcuaro Basin. Many factors have contributed to this process. There is a predominance of slopes and steep gradients. The mature soils (as found on some mesas, saddles, and gentle slopes) were commonly deep and porous down to the impermeable *tepetate* (which will be defined later). Most of the precipitation falls within a period of 120 days (June to October), and this commonly comes in intense downpours of short duration with accompanying high run-off. The natural vegetation has been removed in large part. Although the Tarascans had no grazing livestock or plows before the Spanish Conquest, enormous quantities of wood were cut for their perpetually burning ceremonial fires. The well-developed delta of the Arroyo del Salto (as shown on 16th century maps) would indicate a long history of erosion and sedimentation, as would also the alluvial plains of the Llano de Santa Fe and the Llano de Tzintzuntzan. The introduction of

oxen, equines, sheep and goats in the 1520's and 1530's must have materially affected the natural pasture and browse. European methods and standards of construction and heating probably increased the annual cut of pine, oak, and other trees. The woodworking industries of Quiroga (*bateas*, chests, desks, chairs, etc.) have been an increasing drain on both softwoods and hardwoods. The opening up of the national highway in the past 10 years has increased the market for charcoal. Despite remonstrances during all of the nineteenth century and various laws since the 1880's, the pernicious custom of clearing by burning (with the fires frequently getting out of control) still obtains—as it probably has since man first settled in the area. The excessive deforestation in the general area was commented on as early as the second half of the nineteenth century (Romero 1860-63; León, 1887-88). Also, changes in population and in cultivation techniques have accelerated erosion.

Possibly the change from aboriginal "hole and hill" cultivation with a planting stick and hoe to furrow cultivation with the iron-tipped wooden plow drawn by oxen has been the most important immediate agent in accelerating erosion. With the plow and its furrows came the first widescale breaking of a probably nearly continuous plant cover. Concomitant was the demand by Europeans and their livestock for wheat, barley, and other cereals and hays. Since the areas devoted to maize could not be reduced much, if at all, this demand forced an expansion of tillage into the marginal hitherto little cultivated steeper slopes. The furrows probably ran with and across the slope at the whim of the cultivator, as is still true. This was not too bad if a crop was growing during the rainy season. But from 1810 until recently, rebellion, war and brigandage caused numerous periods of abandonment of all fields at any distance from the towns and villages. In the Quiroga area the general periods 1856-76 and 1916-26 saw the most abandonment of fields.

It is virtually impossible to date the initiation of even the largest eroded areas, such as the slopes immediately to the north and east of Quiroga. Among the older inhabitants one can obtain statements varying from "The erosion began during the Revolution" (some 30 years ago), through "It was as bad at the turn of the century as it is now" (some 50 years ago), to "It was already

bad when I was a small boy" (some 70 years ago). The majority opinion was that most of the slopes had been denuded and gullied for more than 50 years. Probably erosion has been excessive ever since the chaotic period 1856-76. Other large areas stripped of soil and much gullied include the margins of the Mesa de Atzimbo, the slopes above Caríngaro, the slopes back of Zirandangacho, the valley of the Arroyo del Salto above the Puerta de Cuenembo, and the slopes between El Tigre and Sanambo. Recent channeling and gullying has taken place in many areas of gentler slopes such as the Atzimbo-La Noria area above the falls of the Arroyo del Salto, in the area northwest of Quiroga drained by branches of the Arroyo de Quiroga, in the Tirimicua Basin, and in the Icuácató Basin.

Through erosion and denudation, probably half of the arable land of Quiroga has been removed from cultivation. The common resultant surface is composed of bare volcanic rock and *tepetate*. The word *tepetate* requires some discussion since it occurs frequently in local speech as well as in the literature of Mexican geology and pedology. It seems to have come from two Mexican words (*tell*=rock+*petlatl*=mat) meaning "rock-mat" or nature's flooring, or possibly from *tepetl*=hill+*petlatl*=mat. By some geologists it has been restricted to such meanings as: andesitic tuff; tuffaceous conglomerates, pumaceous breccias, pumaceous stone; all nonmetallic earth and ore from mines; a solid layer of the earth cut like peat or quarried rock for house construction; a yellowish-white clayey substance or soft stone; rotten or decomposed rock; the impermeable horizon C often revealed by erosion; etc. In the Quiroga area this Mexican term is widely used, and several localities are known as Los Tepetates. Apparently, in Quiroga at least, *tepetate* is applied to the impermeable soil horizon C or subsoil which is normally $\frac{1}{2}$ to $1\frac{1}{2}$ meters beneath the surface—but very frequently exposed by denudation and erosion. Although it is often found developing from tuffs and breccias, apparently any volcanic mass that has begun to change into hard compact clay can be termed *tepetate*. The color varies from brick red to whitish yellow, but reds and browns are most common. It is the normally exposed "subsoil" on the slopes, and is perfectly useless for cultivation. In time it probably

weathers into the *tierra charanda*, a red ferruginous clay.

The rocks of the area are about 99 percent silicates. The feldspars or silicates of aluminum comprise about 68 percent, and olivine, amphiboles, and pyroxenes constitute nearly 32 percent by weight of the rocks. Plagioclase makes up about six-sevenths of the feldspars, the remainder being orthoclase. Calcicase (labradorite and bytownite predominantly) constitutes more than two-thirds of the plagioclase, the sodacase being principally andesine. The next important ingredient is magnesium silicate or olivine. There are relatively small quantities of diopside, hypersthene, bronzite, augite, and hornblende. Various iron oxides (magnetite, ilmenite, and hematite) complete the list of notable minerals in the rocks of the area. Very small quantities of sulfates, nitrates, carbonates, chlorides, and phosphates occur, as well as a little gold, copper, silver, lead, vanadium, nickel, chromium, barium, and tin—free or in combinations. This means that the 12 or 15 elements most commonly found in the rocks of the earth's crust (oxygen, silicon, aluminum, iron, calcium, magnesium, sodium, potassium, titanium, hydrogen, phosphorus, carbon, manganese, sulfur, and chlorine) occur in approximately that order in the Quiroga area.

The feldspars in the rocks alter through weathering to hydrous aluminum silicates (kaolinite or claylike substances), calcite, sodium carbonate, potassium carbonate, white mica, and quartz. The olivine becomes serpentized, as do the amphiboles and pyroxenes, and iron oxides, calcite, iddingsite, chlorite, epidote and quartz are formed. In time such soluble minerals as calcite, potassium hydroxide, and magnesite are removed in solution, which leaves a final mixture of quartz, claylike substances, and iron oxides. These are the principal components of the soils in the area. In other words, the gross body of the soils is composed of a mixture of grains of quartz and particles of clay—commonly colored red or yellow by iron oxides. Within this Si-O-H-Al-Fe matrix are minor elements and compounds altered or introduced by water, air, plants, and animals. The most important of these are organic carbon, nitrogen, calcium carbonate (CaCO_3), sodium carbonate (Na_2CO_3), sodium chloride (NaCl), sodium and calcium sulfates (Na_2SO_4) (CaSO_4) in negligible

quantities, and compounds of phosphorus, potassium, magnesium, manganese, titanium, and barium.

No scientific study has been made as yet of the soils of the Quiroga area. However, the Secretaría de Agricultura y Fomento (guided by the under-secretary González Gallardo, an outstanding soil scientist) and the Comisión Nacional de Irrigación^{3a} (Departamento Agronómico) during the past 20 years have initiated a modern scientific study of Mexican soils. Since the money, staff, and time available have been restricted, most of the study has been in the larger areas subject to irrigation and development. This means that the porous mountain lands of volcanic origin, the steeper slopes, and the small upland valleys will not be studied for some time. Nevertheless, nearby areas in the Río Grande de Morelia, Zacapu-Río Angulo, and Lower Lerma-Chapala Basins have been studied and reported upon; and several generalized soil maps of Mexico exist. During 1945 and 1946 we obtained soil samples (the analyses of four of which are given below), took numerous field notes, and discussed soils with farmers in different parts of the area. Our information and conclusions are summarized here-with.

Locally there are many ways of classifying lands and soils—by texture, color, form of use, location, water content, saline content, humus content, productivity, etc. A mixture of Spanish, Tarascan, and Mexicano words is employed. Some of the more common terms are as follows:

Texture and structure

English and scientific	Spanish and Indian
Claypan or substratum	<i>Tepetate</i> , caliche.
Clay	Arcilla.
Crumby structure	Migajón.
Clay loam	Migajón arcilloso.
Ash; loess	Ceniza; légamo.
Silt; dust	Limo, lama, fango; polvo.
Alluvium	Alluvión.
Silts	Limos, polvillos.
Loam, open soil	Suelo franco.
Silt loam	Migajón limoso.
Sandy loam	Migajón arenoso
Sand	Arena, <i>cutzari</i> .
Gravel	Grava.
Pebbles; rocks	Guijarros; piedras.
Rocky soil; scabland	Tierra pedregosa; malpais.
Heavy; light	Pesado; liviano.

^{3a} Since this monograph was written these two entities have been changed to: Secretaría de Agricultura y Ganadería and Secretaría de Recursos Hidráulicos.

Color and chemical content

English and scientific	Spanish and Indian
White; grayish	Tierra blanca; pardusca.
Yellow earth	Tierra amarilla, <i>tupura</i> .
Red earth	Tierra roja, colorada, <i>bermeja</i> , <i>charanda</i> .
Brown earth	Café, café obscuro.
Black earth	Tierra negra, prieta.
Oakleaf humus	Tierra <i>tocura</i> .
CaCO ₃ , MgCO ₃ , NaNO ₃ impregnated soil.	Caliche, <i>tepetate</i> (in part).
Calcareous, CaCO ₃	Suelo calcareo, calizo, <i>cal, tizate</i>
Gypsum	Yeso, <i>uiras</i> .
Black alkali; Na ₂ CO ₃ and other carbonates.	Alcali negro, <i>tequesquite</i>
White alkali; chlorides and sulfates of Na, Mg; chlorides of Ca, K.	Alcali blanco, salitre.

Water content, use, position

English and scientific	Spanish and Indian
Swampy	Pantanosos, cienegoso.
Moist, humid	Tierra de humedad, jugo.
Irrigated	Tierra de riego.
Slime, mud, clay	Limo, lodo, barro, <i>atsimu</i> .
Not irrigated	Temporal.
Dry	Seca.
Lowland, plain	Bajo, llano, plan.
Slope	Ladera.
Hilly, rough	Cerril.
Farmland, cropland, field, plot.	Tierra, labor, <i>milpa</i> , <i>tareta</i> , terreno.
Soil; floor	Suelo; <i>echerendo</i> .
Earth; soil	Tierra; <i>echeri</i> .
Pasture	Pastal.
Scrubland	Monte bajo.
Woodland	Monte alto.

Productiveness, miscellaneous

English and scientific	Spanish and Indian
First class	1 ^a clase; jugo or humedad; polvillas; migajón; alluvión; riego; <i>tamaquatarca</i> .
Second class	2 ^a clase.
Third class	3 ^a clase.
Fourth class	4 ^a clase.
Tropical, hot	Tierra caliente.
Subtropical, warm	Tierra templada.
Temperate, cool	Tierra fría.
Microthermal, cold	Tierra helada.
Forest brown	Café de bosque, café forestal.
Oak forest; pine forest	Encinal; pinal.
Prairie, savanna	Pradera.

Many of the above-listed terms are used in combination; e. g., *temporal de primera* (unirrigated land of good quality, dependent upon the summer rains), and *riego de segunda* (second-class irrigated land). The most common sets of classi-

fications are: cultivated lands according to water content (*jugo*, *riego*, *temporal*), noncultivated lands according to use and vegetation (*pastal*, *monte*), arable soils according to productivity (1^a, 2^a, 3^a, 4^a), soils according to color (*charanda* or *colorada*, *café*, *amarilla* or *tupura*, *negra* or *prieta*), and soils according to texture (*arcillosa*, *migajosa*, *arenosa*, *pedregosa*). None of these classifications is scientific or gives an adequate idea of the contents and lacks of the soils.

Locally it is estimated that about 32 percent of the municipality is woodland and brushland (*monte*), 27 percent scabland and miscellaneous nonusable, 21 percent pasture land (*pastal*), and 20 percent arable. The arable land (*tierra de labor*) is composed of *temporal* (about 88.65 percent), *humedad* (nearly 10.85 percent), and less than one-half of 1 percent of *riego*. The *tierras de humedad* are soils in which the subsoil moisture is maintained for a long time after the rainy season by infiltration from exterior sources. Most of such soil areas are near springs, in the lowlands near the lake, and in some of the *joyas* or depressions of the uplands. Most of the *riego* and *humedad* soils are reddish to grayish sandy loams and silts among which the silty alluvial and aeolian *polvillas* are most important. Every rainy season large quantities of extremely fine reddish silt are spread over the lake plains and are deposited in the lake. This silt derives from the erosion of the volcanic soils and rocks of the area, and is moderately rich in organic matter. The *tierras de primera clase* embrace nearly all of the *riego* and *humedad* soils, and most of the *temporal* soils of the higher lake plain, the lower, gentler slopes around Quiroga, and the bottoms and lower slopes of the upland valleys. The remaining grades of *temporal* (second, third, fourth) represent decreased productivity which is a function of excessive use and of steeper slopes. Most of the temporal soils grade from *tierras tepetatosas* and *arcillas* in denuded areas, through clay loams, to sandy loams. The reddish colored clay loams predominate.

In terms of scientific classification, the soils of the Quiroga area are predominantly subtropical and temperate humid (wet-dry) climate (Cwbg of Koeppen; B (p) B'₂ (a') of Contreras Arias-Thornthwaite) pedalfers, with practically no pedocals, and only a thin band of hydromorphs and alluviums along the lake. The deep, friable soils developed *in situ* from the basic volcanic rocks

seem to fall within the group of laterized soils. These lateritic soils are chiefly reddish-brown clays and loams with some development of yellow-brown and yellow soils. In the forested highlands the yellow, brown, and gray-brown soils developed under the pines and in the oak-pine-madroño association grade from lateritic into podzolic soils. Northeast of Quiroga, and outside of the Pátzcuaro drainage basin, there is some development of reddish-brown prairie soils—as in the area just beyond the Cerro Hueco. In a few undrained depressions and immediately along the lake shore are gleized soils approaching meadow (Wiesenboden) and half-bog types. There are no important areas of halomorphic soils, since practically all of the area is well drained. The alluvial soils have been mentioned previously.

Table of Quiroga soils

Zonal:		
Pedalfers:		
Lateritic:		
Reddish-brown clays.	Suelos (arcillas) rojos.	
Reddish-brown loams.	Migajones rojos and café-oscuros.	
Yellow-brown soils.	Suelos café-amarillantes.	
Yellow soils-----	Suelos amarillos.	
Brown forest soils.	Suelos café forestales.	
Podzolic:		
Gray-brown forest soils.	Suelos café-parduscos de bosque.	
Yellow forest soils.	Suelos amarillos forestales.	
Pedocals:		
Reddish-brown prairie.	Suelos de pradera.	
Intrazonal:		
Hydromorphic:		
Meadow and half-bog gleis.		
Azonal:		
Alluvial silts-----	Alluviones, limos, polvillas.	

Most of the soils have well-developed profiles. The normal sequence is an A horizon of loam, a B horizon of soft clay, a C horizon of hard, impermeable clay or *tepetate*, and the underlying bedrock. A hardpan or *piso de arado* is commonly encountered in the lowland fields, owing to generations of cultivation to the same depth with iron-tipped wooden plows. Because of the extreme amount of sheetwash and gullyng, large areas are lacking the A horizon, and considerable areas have surfaces of the C horizon or *tepetate*. Furthermore, al-

though shallow plowing does not mix the *tepetate* with the upper horizons, the denudation of years has deposited upon the lowlands quite a bit of poor soil derived from the *tepetate* of the slopes. In general, the soils range from very deep near the lake to extremely thin on the upper slopes, and have an average thickness of only a few inches.

Red is the dominant color of Quiroga soils. This red varies from brick red, through reddish brown, to a yellowish red. There are many places carrying such names as *Cerro Colorado* and *Tierra Colorada* in the region. The most common shade of red is reddish brown or *café*, which probably constitutes the color of more than three-fourths of the soils. Normally, dark reddish brown or *café obscuro* is a good soil, light reddish brown or *café* is intermediate in value, and the red (*charanda*) and yellow (*amarilla*, *tupura*) soils are poor. The reddish color is derived from unhydrated iron oxides and indicates good drainage and aeration. The yellow soils are restricted to the highlands, commonly in pine-forested areas, as on the slopes of Azul, Chino, and Tzirate, and commonly represent hydrated iron oxides. These yellow soils usually are poorly drained and contain much organic acid. There are areas in the oak-pine-madroño association on the upland slopes where the duff and mull have produced rich but shallow soils known locally as *tierra negra* or *prieta* and *tierra tocura* (from *tocuz*, an oak). These soils are seldom cultivated. Beneath the forest matting, especially at the higher elevations, are poor grayish soils.

The soil varies from heavy, dense compact clays, through the crumb-structured medium-heavy clay loams, to the light open sandy loams. The heavy clays are adhesive, form large hard clods, and are hard to work. The clay loams are normally plastic, form hard clods, and are not too hard to work. The sandy and silty loams are not plastic at all, and are light and easy to cultivate. The *tepetate* and the clays immediately above it are practically impermeable, but the less dense clays and the loams have a high percentage of porosity (commonly 45–53 percent). The water-holding capacity of the clay loams is fairly high. Most of the cultivated soils have no pebbles, little gravel, from 35 to 50 percent sand, 15 to 30 percent silt, and 25 to 50 percent clay. The mean probably runs 41 percent sand, 36 percent clay, 22 percent silt, and 1 percent gravel. Clays and

clay loam dominate the soils of Quiroga. The silt content is too low and the clay content is too high for good soils.

Mineral soils predominate in the Quiroga area. The originally basic rocks of the area have decomposed into somewhat leached soils which are essentially neutral, although the pH or acidity factor usually runs between 6.6 and 7.0. This falls within the optimum range 6.5 to 7.2. In the oak and pine-forested highlands the pH factor may drop as low as 5 or 4, but on the slopes of infiltration and the lowlands of deposition there are soils with alkalinity up to 8. The very harmful black alkalis or *tequesquite* have been fairly well leached out of the soils, although percentages from 0.01 to 0.05 are common. The other harmful alkaline salts such as sodium chloride and sodium sulfate are also nearly negligible in the soils of the area. The calcium carbonate content is rather low for a good soil, but the available calcium is usually adequate. Organic carbon, and organic material in general, is definitely deficient in most of the soils. Available nitrogen and potassium are deficient, but there

TABLE 25.—Analyses of soil samples¹

Item	Analysis of indicated sample			
	No. 1	No. 2	No. 3	No. 4
Color	Dark coffee	Dark coffee	Coffee	Dark coffee
Porosity	48.09	46.56		50.00
Pebbles	0	0	0	0
Gravel	2.20	2.19	6.64	1.13
Sand	41.50	42.50	39.50	46.50
Silt	29.64	28.64	17.64	20.64
Clay	28.86	33.86	42.86	32.86
Texture	Clay loam	Clay loam	Clay	Clay
Water retaining capacity	26.97	26.97		27.63
Available water	21.22	21.17		19.88
Na ₂ CO ₃	.01	.01	.04	.05
NaCl	.02	.01	.02	.01
Na ₂ SO ₄	0	0	0	.71
CaCO ₃	.65	0	.41	0
CaSO ₄	1.58	1.09	.73	.91
Organic carbon	2.72	1.88	1.26	1.57
Organic material	.14	.13	.08	.07
Total nitrogen	110	110	110	140
P available	335+	335+	335+	335+
K available	1,650	1,650	1,375	1,375
Mg available	140	98	55	55
Mn available	35	28	35	28
pH	6.87	6.98	6.71	6.83
Bacterial flora	0	0	0	1
Common name	1* Temp.	2* Temp.	3* Temp.	2* Temp.

¹ The four analyses are considered to be representative of the majority of the arable soils of the Quiroga area. Numbers 1, 2, and 3 come respectively from the plain, lower slope, and intermediate slope of an upland valley in the area (La Noria-Atzimbo). Number 4 is from the higher lake plain south of Quiroga (La Tenería) and represents one of the longest cultivated soils in the area. The soils were collected in June of 1945, and were analyzed in May of 1946 by technicians in the Soil Laboratory of the Dirección General de Agroecología, Comisión Nacional de Irrigación. The writers are much indebted to the staff of the Comisión Nacional de Irrigación and to Undersecretary of Agriculture, Alfonso González Gallardo. A background on the soils of Mexico, and edaphology in Mexico, can be obtained from reports of González Gallardo (1941); Waitz (1942); Foglio Miramontes (1936); and Rodríguez (1942).

² P. p. m. = parts per million.

usually is ample phosphorus, magnesium, manganese, and sulfur. The bacterial flora is not sufficient. In general, the Quiroga soils need lime, gypsum, organic carbon, nitrogen, potassium, bacterial flora, and possibly boron, copper, and zinc.

GENERAL FARMING PRACTICES

Most of the fields and parcels are within 2 miles of the homes of the farmers, whether they live in Quiroga town or in the ranchos. However, the *ejidatarios* must walk from 3 to 7 miles to reach their parcels, and a few residents of Quiroga farm on the Cerro Azul and north of La Tirímicua at distances between 3 and 5 miles. There are no permanent habitations on or near the fields excepting when the fields approach the margins of town or the rancho settlements. Even in the latter case the home of a farmer is normally not on or adjacent to his field. Most farmers have no structures on their fields, excepting a tiny shelter (which varies from a brush and mat leanto to a miniature house with roof of shake or tile, and adobe or loose stone walls on two or three sides) which is occupied by some member of the family during the period just after planting (to keep birds and other animals from digging up the seeds), and again as the crop ripens just before the harvest. Even such ephemeral structures are lacking in a majority of the fields, and the watchers either camp out in the open or are replaced by scarecrows of various types. A few of the wealthier landowners have erected large storage buildings or barns (known locally as *jacales*), but there are not more than five or six of these in the entire area. The typical *jacal* consists of an elevated tile roof (either of one or two sheds), supported by high adobe walls (usually the adobe bricks are arranged so as to leave many openings on one side for ventilation), which covers two or three units or rooms. The largest unit is commonly used for the storage of maize fodder, wheat straw, bean hay, etc. The second unit houses the plows, yokes, harness, and other farming tools. Sometimes a third carefully built unit serves as a granary. Quite often a cattle corral and a threshing floor are nearby.

Practically all fields which border main roads have some sort of fencing. In the lowlands there is considerable use of two- and three-strand barbed-wire fences, which commonly are punctu-

ated by coral trees, yuccas, agaves, and *chupires*. These items of vegetation probably represent remnants from the pre-barbed-wire period. In the ranchos and generally throughout the highlands the fences may be of loose stones piled up into walls between 3 and 5 feet in height, of logs and poles, of hedges composed of natural vegetation allowed to grow freely, and of cut brush. Fine masonry walls or fences such as can be seen on some of the former haciendas in other parts of Mexico are lacking. Adobe walls are used only in the settlements to enclose *solares*. The tall *cardón* or *órgano* cactus is lacking outside of the settlements, and consequently this typically Mexican form of fence is lacking. Although agaves are to be seen along fence lines throughout the area, there are practically no rural fences composed entirely of alined *maqueyes*. When one large field is subdivided, or is farmed by two or more different individuals, there is commonly no fencing and the line of demarcation is indicated merely by stone or wooden markers at each end or side of the field. If the fields are under cultivation there will be a narrow strip of unbroken soil (*omecua*, which is the Tarascan word for island) between the cultivated patches. In the lowland fields of good soil this *omecua* is often reduced to a ridge less than a foot in width. Probably the typical Quiroga fence is the above-mentioned stone wall. In this land of volcanic flows there is no dearth of fragments of vesicular lava rock. These stones are piled in graduated fashion, with the largest at the bottom in one or two rows, so that the wall tapers upward. Perhaps the mean dimensions are 3 feet in width at the base, about 1 foot at the top, and a height of around 4 feet. Commonly no gaps or spaces are left for gates, and when entry is desired it is necessary to remove enough stones (usually near a corner) so that a man can step through. If animals are to be admitted several more stones are removed, and the oxen, horses or burros, pass through singly. Small boys, hunters, people taking a short cut, and trespassers such as ourselves, usually try to climb over these fences, and the normal result is an avalanche of the loosely piled stones. Just as in our range-cattle States every decent citizen closes all gates he has opened, so in Quiroga the conscientious trespasser will rebuild every wall he knocks down or tumbles over. If a field is not under cultivation, one or more temporary "gates"

usually will be left open. Where formal gates exist they are usually of two styles. The simplest gate is the *puerta de trancas* which consists of two side posts with as many rectangular perforations as the number of cross pieces or *trancas*. When the gate is closed all two to six poles are inserted in their proper slots. The normal number of poles or *trancas* is four, and when the gate is opened usually only the upper three poles are pulled out of the slots on one side and man and beast enter by stepping over the bottom *tranca*. A more elaborate gate is the *puerta de golpe* (push gate) which occurs in many forms. The principal elements consist of the two lateral gate posts, a turning stone or butt hinge upon which the lower end of the gate frame turns, and a frame or gate proper. The gate frame is based upon a carefully selected piece of wood (usually oak) whose upright portion becomes the inner turning post, and which has a limb that curves out upward and to the right. Other pieces of wood are attached through insertion in slots and by binding with withes. Usually no metal is involved in the construction of these gates. The gate frame is attached to the left-hand (as viewed from the outside) gatepost by two or three bands which usually are of withes, sometimes are of leather, and rarely are of wire. When a small roof is erected over such a *puerta de golpe* or any other type of gate it is known as a *portón* or *zaguán*. These roofs are made of a wooden framework covered by shakes or tiles on two sheds or slopes. Sometimes a space is left open under the roof, and this space serves as a temporary storage place or granary. *Portones* are more common in the settlements than in the fields, and are far more common in Guerrero and Michoacán than in any other part of Mexico.

The size of the individual cultivated field or parcel varies greatly. We were unable to determine the mean and modal sizes of the cultivated parcels scattered over the Quiroga area. Perhaps the bulk of the cultivated land is in parcels of between 2.25 and 6.5 hectares, but this is little more than an informed guess. There are quite a few parcels of less than 1 hectare, and there are several with more than 20 hectares. Most of the cultivation units are worked by two or three individuals (commonly members of one family), with an additional one or two temporary workers being hired if necessary during the periods of plowing, planting, and harvesting. The *jornaleros del*

campo average \$2 a day (for all types of farm labor), although there seemed to be a range from \$1.50 to \$2.50. Farm equipment is simple, although there is considerable range from farmer to farmer. The man who owns his farm commonly possesses one wooden plow and accouterments, one machete or brushhook, one ax, one pitchfork, one flat shovel or spade, and an assortment of raw-hide thongs, cordage of *ixtle* (agave fiber), harvesting bags, sacks and cloths (*ayates*). Usually there is no wheeled vehicle, not even a two-wheeled cart. The average proprietor also owns a yoke of oxen, and possibly a burro or horse.

The renters or sharecroppers (*medieros*) usually possess all items mentioned above excepting the pitchfork and spade (which will be borrowed or rented) and the animals (which are rented). There seem to be two types of share-cropping contracts: on good lands the *medieros* pay for the seed, rent the work animals, undertake all necessary work, and return one-half of the crop to the owner of the land; on poor lands the owner supplies the seed and the work animals. The wooden or Egyptian one-handled plow of this region has been described and illustrated in detail in an earlier report of this series (Foster, 1948, p. 60), so it will suffice to say that it consists of seven pieces of wood and a steel plowpoint or share (*reja*). The main piece or *cabeza* (combined handle, foot, or body that slides over the ground, and point or share) is adjusted to the plow shaft and an *orejera* or clod spreader by a system of wedges which regulate the depth of plowing between skimming the surface and a depth of about a hand span. The plows and yokes are usually made of oak; it takes 3 days to make them, and they commonly last about 3 years. The *reja*, which is a pointed steel shield which is fitted over the plow point, is about 9 inches long, costs 7 to 8 pesos, and is purchased in Quiroga or in one of the larger cities (Pátzcuaro and Morelia). Both plows and *rejas* are made in Quiroga. The wooden yoke is lashed to the plow shaft and to the horns of the two oxen with leather thongs and ropes. An inevitable accompaniment of plowing is the goad or prod (*garrocha*) of cane (*otote*) with metal point (*gorguz*) at one end for prodding the oxen, and a leather button at the other end. Some *garrochas* have a metal blade for cleaning the *reja* and inserting in the ground as a marker instead of the button.

Machetes vary considerably in shape, size, and manufacture—from short straight knives (commonly manufactured in Connecticut) to long slightly curved *bolos* and deeply curved medium-sized *garabatos*. The two latter forms are usually of Guerrero manufacture and probably represent a carry-over from the days when *arrieros* from Quiroga frequently made the trip to the Guerrero coast. However, machetes are not so numerous or important in the highlands of Michoacán as in the thorny scrub country of the *tierra caliente* in southern Michoacán and in Guerrero. The axes, occasional mattocks, pitchforks, and spades and shovels are usually of local manufacture and are rather crude. The cords, bags, and cloths of *ixtle* commonly come from Guanajuato, Queretaro, and San Luis Potosí. Leather thongs and ropes are made locally.

SOILS AND FERTILIZATION

Most of the fields now in use have been cultivated for centuries, probably since shortly after the Conquest when acquisition of the good lowland lands by the Spaniards forced the Indians onto the slopes and into areas somewhat remote from their settlements. Very little new land is added by clearing the forest and scrub (*monte*), and even such lands are suspect. A great deal of the scrub and timber on the slopes near Quiroga seems to be a "second growth" probably several times repeated. All of the soils in the Quiroga area are deficient in one or more plant nutrients. However, very little attempt is made to fertilize the soil. Where a field has been allowed to lie fallow for several years and thus accumulate a considerable cover of vegetation there is fertilization through the organic matter which is plowed in, and the deficit of potash is made up from the ashes of the brush cover which was burned. The normal sequence in such cases is to chop down the brush in the winter months (December, January, and February), let it dry for a time, fire the dried brush in March and April, and commence plowing in May. This clearing and fertilizing by fire (*la quema*) has been prevalent for centuries, and despite State and Federal laws against such fires (which frequently get away and burn up good timber) since the 1880's the practice continues. While we were in Quiroga we noticed smoke and fires in the highlands beginning about March 27, which continued for about a month,

and a number of these fires did damage to the pine and oak forests. This practice is by no means local, and over much of Mexico at this season the atmosphere is clouded with a smoky haze. The lands that have been cleared for some time are kept productive by rotating crops, allowing them to lie fallow, and by adding animal manure. The common sequences in about two-thirds of the lands (especially in the ranchos) are: (1) To plant one crop of maize or wheat or barley, rest a year, plant *habas*, rest a year, and then repeat the sequence (for poor lands); or (2) to plant wheat (September–May) followed by maize (May–December), rest a year (that is, from December to May), plant *habas* (May–January) followed by maize (May–December), rest a year (from December to September), and then repeat the sequence (for lands of intermediate quality); or (3) to plant fall wheat followed by spring maize, rest a year (December–September), and then repeat the rotation (for fairly good lands). This rotating with *habas*, and the interplanting of kidney beans with the maize, probably provide all of the nitrogen needed. Only on the best lands in the upland basins or *joyas* and in the lowland fields of the Llano de Tzintzuntzan are crops planted every year on the same fields, and this is made possible by extensive manuring of the fields and by enrichment of the soils through sheetwash and the deposition of silt washed down from the slopes. However, not all of the deposition from sheetwash is beneficial, since some of the adjacent slopes have only sterile *tepetate* surfaces. Manuring is carried out in two ways: (1) by pasturing livestock on the unharvested maize stalks (*rastrojo*) left standing in the fields, and (2) by hauling in many *cargas* (animal loads) of cattle manure from the corrals (*estiércol del corral*). The latter form is laborious and expensive, and is done only by the richer and better farmers on the best available lands.

One might summarize the condition of the cultivated soils in the Quiroga area by saying that in texture and acidity and alkaline content they are close to the optimum; but in general the soils are too thin or shallow; there is frequently a deficiency of moisture in the soil; and usually nitrogen, potassium, lime, gypsum, organic carbon, and certain metals could be added with profit. The utilization of wood ashes and manure, and rotating or interplanting with legumes, probably take

care of the deficits in nitrogen and potassium, and the calcium lack is not marked. If the soils are kept up they are appropriate for the principal crops now raised in the area. The basic difficulties are a lack of sufficient soil (in depth and in area) and insufficiency of water, and both of these conditions are due chiefly to the cutting of timber and clearing of fields on the upper slopes. With much of the vegetative cover gone the waters of the rainy season are not held back and absorbed, and the accelerated run-off keeps adding to the area of gullied and denuded slopes. A number of preventive and corrective measures are possible. Cutting of trees, pasturing, and cropping on the upper slopes should be discontinued. The value of the wood, pasture, and crops obtained from these submarginal lands is quite small. The people who formerly made a livelihood in those areas could be put to work by the State planting wood lots of eucalyptus (which does quite well in the area) to provide fire and post wood, building check dams at the heads of the gullies, and planting cover crops on the nearly denuded slopes. Several tropical forms of drought-resistant *Lespedeza* and kudzu (*Pueraria*) have been developed which cover the ground completely within a few months, and which provide not only soil cover but also forage and hay, and they enrich the soil with nitrogen. Other legumes which provide cover, forage, and nitrification of the soil are certain clovers, *Crotalaria*, lupines, and the vetches. All of these should do well in the area since there are numerous closely related wild forms. Temporary relief from the water shortage can be obtained by placing a number of windmills over shallow wells along the lake margin, and pumping the lake water (through a series of windmill-powered lifts) into reservoirs in the canyons above Quiroga whence the water could be led by gravity canals to the majority of the fields around Quiroga. So long as the soils are shallow it would be a mistake to alter the present method of shallow plowing with wooden plows, but plowing should be discontinued completely on the slopes since even contour plowing is not sufficient to prevent wash. The ideal situation would be to have every individual field tested as to the chemical content of the soil before prescribing the proper fertilizers. Such crops as soybeans and sorghums probably would produce well in the area, and there is great need for improving the strains of maize, wheat, and

beans. Drastic remedies are indicated for the sick soil and agriculture of the region. From colonial times to the present there has been a steady decline in soil fertility, and just since the 1880's the Quiroga area has lost about 30 percent of its productive capacity (comparing yields of maize and wheat per unit quantity planted).

FIELD CROPS

Everybody agrees that the chief field crops, in order of acreage planted, are maize, wheat, *habas*, beans, followed by either barley or cucurbits, and alfalfa. However, there is absolutely no agreement as to what the actual acreages are nor what the average annual production of any crop may be. We have already outlined the methods of land description, and it is obvious that in most cases the people honestly do not know how much land they own or cultivate in terms of hectares or other units of the land itself. They are accustomed to measuring the land indirectly in terms of how much seed is planted. Consequently we have long lists of how many liters of maize, wheat, and other crops were planted, but very little certain information as to the areas involved. It is not possible to convert liters of maize, for example, into the number of hectares planted in the Quiroga area since the amount planted per unit of area varies greatly with the location and richness of the soil. We have determined some approximate means for statistical purposes, but they are nothing more than approximations which may be as much as 20 percent off in either direction. Production is often stated in terms of returns per unit planted; e. g., 30 for 1, which may be 30 liters for 1 liter or 30 *fanegas* for 1 *fanega*. The difficulty in this case is that the yields or returns vary tremendously from one year to another and from one field to another. Even when we obtained a total figure for some person's harvest the figure would be rendered suspect either by our own observations or by checking with neighbors and merchants to whom the crop was sold. There is a deep-seated reluctance to let any outsider know the true amount of production or income which stems from generations of sad experiences with tax collectors, the collectors of the church's tithes (no longer legal), revolutionaries in need of supplies, and others of similar ilk. To further complicate the picture of acreages and productions are the various sequences of crop rotation and fallow which

obtain in different portions of the Quiroga area. With these preliminary observations out of the way we will try to set forth the statistics of field cropping in Quiroga. Of one thing we are certain, that our figures are better than most official figures that have been compiled for the area at the times of the various censuses, because those figures were compiled by remote control.

UNITS OF AGRICULTURAL MEASUREMENT

The system of agricultural measures of area, capacity (volume), and weight is in a state of anarchy because of the variable conversions of old Spanish units into units of the recently adopted (only about 50 years officially) metric system. The conversions are variable (1) because of the fact that the old Spanish units varied from one province of Spain to another, (2) because of variations in the weights and sizes of different grains (with which we are familiar through the different weights of a bushel), and (3) because of individual variations in amount of grain planted per unit of area. During the colonial period and until about 1896 it was customary for an official to make an inspection (*visita*) once a year to each jurisdiction or municipality and check the local standards of weights and measures against master units which he carried with him. This was known as the *visita de fiel contraste*. During the nineteenth century each *ayuntamiento* of a municipality kept a number of weights (marked pieces of metal) and boxes of different volume content which served as the standards for the municipality. In 1869 Quiroga adjusted its local grain measures (*medidas para semillas*) to the standards obtaining in Morelia, but despite this adjustment there are numerous differences today between values in Morelia and in Quiroga, and even from one part of the Quiroga municipality to another. The basic measurements of volume were a small lidless and strongly constructed wooden box which held approximately 2 liters, and another which held about double this amount. These units were termed *cuartillo* and *cuarterón*, and the *cuartillo* originally represented the fourth part of a *celebrín* or Spanish peck, which in turn was about the twelfth part of a *fanega* or Spanish bushel. Apparently the present sizes or capacities of these measures have been altered so as to conform with certain even parts of the metric system, e. g., 50 *cuartillos* make a *fanega* of 100 liters in most cases.

The *medida* is the actual metric counterpart of the double-*cuartillo* or *cuarterón*, and contains 5 liters of dry measured grains. In table 26 we give the range in interpretation current in the Quiroga area; those values that are official or which are most commonly accepted in the case of several values are shown in *italic*. We have not presented the units of planting area since there is extreme variation in this group of measurements. For example, a planted bushel of maize (*fanega de sembradura de maíz*) seldom conforms with actual practice, and is valued from about $\frac{1}{2}$ (0.64) to 4 (3.6) hectares. Also, a *tercio de sembradura de trigo* (a planting unit for wheat) varies from about 4 to 8 hectares and a *yunta de sembradura de trigo* (yoke—of oxen—of wheat planting) varies from about 3.5 to 6.0 hectares.

TABLE 26.—Agricultural weights and measures
VOLUME OF CAPACITY¹

Unit	Maize	Wheat	Beans	Habas	Miscellaneous
	<i>Lit.</i>	<i>Lit.</i>	<i>Lit.</i>	<i>Lit.</i>	
Almud.....	7.5-8.0				
Carga.....	200	200-210-220		200	
Cuarterón.....	2-4	4			
Cuartilla.....	25		25	25	
Cuartillo.....	0.5-2.0				
Fanega.....	100	105	100	100	Ca. 2.58-2.84 bu.
Hanega and anega (the same as fanega).....					
Hectolitro.....					100 litros. 0.91 dry qt.
Litro.....					
Media.....	50				
Medida.....	5	5	5	5	
Ochavo.....	1-2				
Saco.....				150	
Tercio.....		100-110			

WEIGHT OR MASS

	Maize	Wheat	Beans	Miscellaneous
	<i>Kg.</i>	<i>Kg.</i>	<i>Kg.</i>	
Almud.....	5.6+			
Arroba.....	11.506	11.506		25.36 lb.
Carga.....	136-138-140	160-161		
Cuarterón.....	1.4-2.8			
Fanega.....	68-70	80	80	
Kilogramo.....	<i>Lit.</i> 1.47	<i>Lit.</i> 1.31	<i>Lit.</i> 1.25	2.2 lb.
Litro.....	<i>Kg.</i> .68-70.			
Quintal.....				46 kg. or ca. 101.47 lb.
Tercio.....		<i>Kg.</i> 80.5		

¹ Values that are official or which are most commonly accepted are in *italic*.

MAIZE OR INDIAN CORN

The chief crop since prehistoric times has been maize or Indian corn (*Zea mays*), which is commonly termed *maíz*, although the Tarascan name *tsiri* is used occasionally. From a check of the fields, a number of home granaries, stores kept by

merchants, and through general questioning, it appears that of the various classic types or subspecies of maize only dent and flint are cultivated in the Quiroga area. These two types intergrade so that the maize kernels are dent, semident, and dentless flint. In general, all of the maize falls into the type recently named Mexican Pyramidal. The majority of the kernels are dented and tapering ("pointed"), and next in number are the kernels which are rounded and semident. There are five major color types and various gradations or blends (hybrids). The most common type is yellow maize (*maiz amarillo*), also known as native maize (*maiz criollo*), which grades imperceptibly into the second type called *maiz blanco* or white maize. Actually these two color types represent the extremes of color variation within one general type, and many of the farmers recognize this fact and refer to the same maize by all three names listed previously. A subtype with a smaller kernel which is commonly planted at the higher elevations is known as *maiz amarillo delgado*. This may represent an introduced strain from the high valley of Toluca, or it may be merely a locally selected variant. The above type or types constitute at least four-fifths of the maize planted in the area. A third color type, *maiz colorado* or red maize, appears to be merely a color mutant of the *maiz criollo*. The fourth color type, *maiz prieto* or black maize (actually a blue to purplish black), is definitely distinct from the previous types in having a majority of its kernels rounded and semident, and in containing a higher sugar content in its stalks. Possibly this maize is descended from the prized strain whence the ancient Tarascans obtained a sweet juice or sap which was boiled down to sirup and also converted into a fermented drink (the *pulque de tlaolli* of the Mexicans). *Maiz prieto* is comparatively rare in Quiroga, although we observed quite a few plants of this type in the higher fields of Santa Fe on the slopes of Tzirate. Probably the cooler growing conditions increase the sugar content of the stalks. The last color type is nothing but a mixture of the previous types which gives rise to *maiz pinto*, which has two or more colors represented in the kernels of one ear. From some sampling it appears that the kernels are arranged in from 8 to 20 rows, with the modal number being 12 or 14. The plants vary from 1

to 4 meters in height, the lesser heights apparently representing merely inferior growing conditions. It is not possible, from the early sixteenth-century records, to determine what were the indigenous types of maize, since maize was described only in terms of colors. There were reported to be colored (*colorado* could mean merely red, or it could refer to any intense or brilliant color such as black, red, and yellow), white, and spotted (*pinto*) types. The use of the term *pinto* would imply that more colors were represented than merely white and red. Tradition, as well as the more ceremonial usage of *huauhtli* (*pari*) grains, indicates that the Tarascans had the cultivated amaranths before they acquired maize. Possibly the ancestral Tarascans were already in the Michoacán area when they first acquired maize, but it is equally possible that they found maize already being cultivated when they immigrated from their unknown homeland. There are a number of fascinating identities and similarities between the prehistoric cultures of southwestern Mexico and those of the northwestern portion of the so-called Incan Empire (prior to the development of this empire), among which is the similarity of the Quechua and Tarascan words for maize (*sari* and *tsiri*). Although the origin of dent maize is not known, and the role of teosinte has been challenged by Mangelsdorf and Reeves (1939), the region of upland valleys from Jalisco to Oaxaca is still as good a candidate for origin-area as any. In this connection the prevalence of teosinte in the Pátzcuaro Basin is of interest. Teosinte (*Euchlaena mexicana* Schrad.) is quite common in the lowlands around Quiroga, principally in the fields and at the margin of fields northwest and west of the Cerro Huarapo, near La Tepóricua, and in the fields above the Cerro de La Cruz. It was so abundant near the Cerro Huarapo in December of 1945 that we were able to collect about a half bushel of kernels in less than 2 hours. Teosinte is known locally as wild maize (*maiz silvestre*), dog's foot maize (*huichuantziri*), and "compacted" maize (*maiz cundaz*, *tzicundá*, *atsiri-cundaz*, *tsir-cundaz*). The latter term is derived from *cundare* (united) because the kernels are packed together instead of being on a cob. Teosinte is not purposely cultivated, and is useful only for fodder, since the kernels are so hard that they cannot be ground in the ordinary fashion but must be "popped" or exploded by heat.

Practically every portion of the maize plant is of use. The kernels, of course, are the chief product. Maize is the leading foodstuff in Quiroga, as it is over most of Mexico, and constitutes more than half of the food consumed—whether measured by volume, equivalent dry weight, or calories. Maize is consumed in dry form (parched and ground, as in *pinole*); as a drink (the parched or boiled ground grain cooked with water and various flavorings, which varies in consistency from milky-colored water, through thin gruels, to watery mushes—known in general as *atoles*); boiled and roasted on the cob; cooked with ashes or lime and ground to a mealy dough which is used for many dishes, ranging from the predominant tortilla and tamale to dumplings and thickening for stews; in the form of hominy which is the base of the famous Michoacán and Guerrero *pozoles* and *menudos*; and in other minor forms. Up into the nineteenth century a kind of native beer or *chicha* was made from maize kernels, but this drink has been completely supplanted by the European-style barley beer, which is brought in from the outside. Neither *miel de caña de maíz* nor *pulque de tlaolli* is made any longer, but the stalks of the sweet-stalked maize are often chewed, as one would a section of sugarcane. The dried corncobs or *olotes* are used as fuel, and also (tied into a circular bundle or disk known as an *olotera*) for shelling or degrading the ears or ripe corn (*mazorca* in Spanish, *centli* in Mexicano, and *xanini* in Tarascan). Husks are used for wrapping foods and cigarettes. The tassels and pollen are still used on occasion in folk medicine. Some of the lesser green leaves (*kani*) are cut before the harvest as emergency fodder for the livestock, and the dried leaves (*hojas secas* or *xaracata*) are used at times as wrapping for foodstuffs and (cut into rectangles with scissors or knife) as cigarette “paper.” The entire plant after the ears have been harvested may be left in the field as standing fodder, or more commonly the cut stalks and leaves are dried, stored on racks or in sheds, and fed to livestock as the chief animal fodder (*rastrojo* in Spanish and *arón* in Tarascan). Maize fodder and other grass hays and straws are referred to collectively as *zacate* (Mexicano) and *huitzacua* (Tarascan). Maize stalks and leaves (with the husks attached) are frequently used as a cushion over the floor or planks upon which the bed mat is spread, and in some of the more sophisticated

homes mattresses are stuffed with the same material (after the larger canes or stalks have been removed), and pillows are often stuffed with maize husks. The principal commercial elements are the ears and shelled grain and the *rastrojo* fodder, and the leaves and husks separately to a lesser extent. The principal market is in Quiroga town, and only a small amount of grain is exported.

The maize cycle commences with the first plowing or *barbecho*, which begins in January or earlier on the upland fields not planted to wheat, and in May on the lowland fields. If the field is new or is an old abandoned field, the *barbecho* is delayed until the vegetation has been cut (*rosa* or *tala*), dried, and burned (*quema*), and the first plowing on such upland fields will not take place until May. The *barbecho* takes from 1 to 2 weeks with one yoke of oxen on most of the parcels in the Quiroga area, and consists of closely spaced furrows (*rayas* or *surcos*) about a span in depth. In 1945 most of the plowing in the lowlands began between the 14th and 16th of May. Immediately after the initial plowing the entire field is replowed with furrows that cross those of the first plowing at an angle between 30° and 90° according to the amount of slope. On nearly flat fields this *cruza* is at right angles since there is no need to fear the gulying that would result should unseasonal rain find a field with furrows going up and down the slope. Where the soil turns up in large clods the clods or *terrones* are broken up with a mattock. The preliminary plowings are completed with a third plowing which is somewhat deeper than the first two, and which not only improves the tilth but allows a greater number of upturned larvae to die. Normally all of these plowings are completed before the heavy summer rains begin. As soon as one or two good rains have soaked the soil, seeding begins. In 1945 most of the lowland fields were planted between May 28 and June 9. That year there was rain May 18, a sprinkle on the 21st, rain on the 22d, a shower on the 29th, heavy rains on the 30th and 31st of May, and rains on through the first 6 days of June and thereafter sporadically for a total of 17 rainy days in June. That year was considered to be normal in the incidence of rain. The meteorologic relationship of May and June is shown by the 20-year precipitation means from the nearby station of Pátzcuaro, where the total annual mean is 1,065 mm.: January, 16 mm.; February, 14 mm.; March,

9 mm.; April, 5 mm.; May, 36 mm.; June, 174 mm.; July, 251 mm.; August, 239 mm.; September, 188 mm.; October, 82 mm.; November, 30 mm.; and December, 21 mm. On the upland fields sowing of maize commonly takes place in March and on into May.

The seed grain is normally selected through a gradual process of elimination. After the harvest, as the family begins to eat the maize that was not sold, the house-wife each time she needs maize to grind selects the poorer ears. When planting time comes around, if the family is fortunate enough to have a sufficient residue, there is a remnant consisting of the largest ears with the best kernels. These ears are now shelled and the seed is ready for the planting. In the highland fields on slopes there may be plowed only one open furrow or *surco* for planting which parallels the first and third plowings, but wherever possible (both in the uplands and lowlands) the *surcada* is at an angle (commonly 90°) to these plowings. In the more common case of plowing *en cruz* or at an angle, the planter (usually a boy or a woman) follows the plowman and drops three kernels of maize at every intersection—which are normally 75–90 cm. apart. The planting furrows are also 75–90 cm. apart. Should there be interplanting another boy or woman will follow the maize planter and will drop one or two kidney beans by the maize kernels. About two-fifths of the maize fields in the Quiroga area are interplanted with kidney beans. Should pumpkins also be interplanted a single pumpkin seed may be dropped in the same spot with the maize and beans by a third planter, but more commonly pumpkins are planted only with maize. The poorer families who do not own or cannot afford to rent a second yoke of oxen cover the seed by kicking in sufficient earth, but the more common procedure is for a second yoke to follow the last planter about a span to one side of the seed furrow and the *orejera* throws earth which nearly fills the seed furrow. In some fields the last planter or another person places a small handful of manure by each group of seeds. About 2 weeks after the planting, by which time the young maize plants are about 10 or 15 cm. tall, the field is examined for hills that did not sprout. Reseeding (*resiembra*) is done with a digging stick (*coa* or *estaca*). Where there is interplanting the average hill contains two maize and one bean plant.

Immediately after the *resiembra*, and commonly 2 to 3 weeks after the planting, is the first cultivation (*escarda*, *changuero* or *beneficio*). This *primera escarda* is done by plowing along one side of the seed row in such a fashion as to throw earth onto the seed row. One or two boys follow the plowman and “hill” or *amontonar* the plants by uncovering and straightening the smaller plants and heaping up the earth by hand. This first cultivation usually occurs about the middle of June (17th to 25th, in 1945). From 1 to 3 weeks later comes the second *escarda* also known as *la troza*, which is accomplished by plowing an open furrow at right angles (on flat lands and gentle slopes) to the seed rows in such a fashion as to throw dirt to both sides. Boys again follow the plowman and hill the plants. Two to three weeks later there may be a third *escarda*, known as the *tablón*, on the better lands. The *tablón* is an open furrow plowed at right angles to the *troza* and parallel with the seed rows. These various cultivations result in an orderly rectangular pattern of maize hills, which pattern degenerates progressively as one goes from the fields on level land to those on steep slopes. Normally all plow cultivation is concluded by the middle of August. During the cultivation period the excess suckers are removed (*raspa* or *desahije*) and fed to the livestock.

In August and September, normally beginning when the maize is in tassel, it is necessary to weed (*chaponear* or *desenzacatar*) some of the fields. The weeding is done with a small curved machete or sickle (*garabato* and *hoz*), and is done in a leisurely and informal fashion. The fields in the Quiroga area are cursed with many native weeds and also with some 40 plants introduced with seeds from the Old World. Among the more common native weeds are bracken (in the upland fields), some 15 genera of grasses, nettles, *Polygonum* and *Rumex* (in the lowland moist fields), various amaranths and chenopods, *Phytolacca*, *Arenaria*, *Cerastium*, *Argemone* (the Mexican prickly poppy is quite abundant on some fields), *Lepidium*, a number of legumes (especially *Astragalus*, *Crotalaria*, and *Desmodium*), spurge, mallows, *Eryngium*, milkweeds (very common), bindweed and dodder (*Convolvulus*, *Cuscuta*, *Ipomoea*), verbena, mints and sages, solanums, cucurbits (especially *Sicyos*—the *chayotillo* or *acarén*), and some 16 genera of composites (among which *Bidens*, *Cosmos*, *Tithonia*, and *Tagetes* are most

common in the maize fields). Among the more common or annoying of the introduced weeds are canary grass, bermuda grass, nettles, dock, tumbleweed (*Amaranthus spinosus*), wild mustard and wild radish (both very common), bur clover or *carretilla* (*Medicago denticulata*), filaree, horehound, sow thistle, and dandelion. Apparently neither ragweed nor cocklebur has reached the Quiroga area. A number of the weeds are poisonous to stock, such as some of the spurge, solanums, milkweeds, *Astragalus*, *Senecio*, etc. Despite the weeding the average maize field is a tangle of maize, beans, and weeds when harvesting begins. At this time the outstanding weeds are various wild sunflowers (*andán* and *mirasol*), marigolds or *cinco-lagas*, cosmos, *hierba del tabardillo* (*Piqueria trinervia*), the tangled runners of *Sicyos*, several legumes and grasses, and wild radish.

Some harvesting begins at the end of September or during October and the early part of November, when tender roasting ears (*elote*, *helote*, and *jilote* in Mexican, and *tiriapu* in Tarascan) are available. Also, after the ears have begun to ripen, early fodder is obtained by cutting off the tops of some of the plants (*despuntar*) and some of the leaves. An occasional farmer may turn down the maize plants (*doblar*) so that water will not enter the ears. A few fields in the lowlands may be completely harvested and cleared during November, for food and to prepare for the planting of wheat, but the majority of the harvesting takes place in December—usually between the 14th and 24th of the month. The harvest of ears or *pisca de mazorcas* is commonly done by men, while the beans are harvested by the women. The cutting of the beans (*corta de frijoles*) may take place before or after the *pisca de maiz*, but usually it is afterward. The equipment of the harvesters consists of a husker or *piscador* (*pikuransk-cua* in Tarascan, which seems to be a modification of a Mexican word), which is a knifelike blade of steel or deerhorn of varying size with one or two holes for a finger band of *ixile* fiber, a carrying bag (*costal* or *parataracua*) of burlap or *nequén* which is slung over the right or left shoulder, and a cloth or *ayate* (*uangoche* or *guarcoche*) of *nequén* for carrying the ears away from the field. A wicker basket (*chiquihuite* or *xundecosechero*—a mixed Tarascan and Spanish word) is used instead of the *costal* only when there is a large and easy harvest. Usually two or more men harvest a field, each working

one row at a time. If the harvest is large, or if the field is at a considerable distance from the farmer's home, the ears are heaped near the margin of the field and after the harvest is completed the ears are packed home in nets, sacks, and cloths by burros. After the maize and bean harvest, if the field is not to be cultivated in the near future, livestock are allowed to pasture on the standing fodder; otherwise the *rastrojo* is cut, piled temporarily in shocks, and then conveyed to houselofts (*tapancos*) or platforms built above the reach of livestock. Instead of a platform quite often a few poles are placed across the branches of a tree and the *rastrojo* is laid there.

The success or quantity of the maize harvest is contingent upon many factors in addition to the fertility of the soil, care in cultivation, and quantity and quality of the seed. Probably the most important prerequisite is that there be the proper amount and distribution of precipitation and temperature. The temperature conditions are usually adequate, since maize can be cultivated in southern Mexico up to about 3,200 meters (10,499 feet), and the highest fields in the Quiroga area are only 2,870 meters on the slopes of Tzirate and 2,820 meters on top of the Cerro Azul. However, much of Sanambo and the highlands extending through the Cerro Azul and Cerro Chino to Tzirate (including much of Icuácat and La Tirímicua, and a part of Caríngaro) lies within the *tierra fría* with heavy frosts in winter and spring, and these lands are commonly planted only once a year with maize, wheat, *habas*, or barley. In the lowlands around Quiroga, although there are frosts every winter (a few in December, mainly in January, and some in February) usually they are light and number only between 10 and 20, and seldom reach the fields close to the lake. Lack of sufficient rain in June, July, and August is the principal cause of poor harvests. In recent years there have been dry series in 1932–33 and 1938–45 (broken by a wet year in 1941), and wetter than average series in 1930–31 and 1934–37. Hail, which occurs most often in connection with the convectional storms from May through September, can blight a crop if there is too heavy a concentration while the plants are young. Although it harmed the maize crop but little, a hail storm on September 27, 1945 (which accumulated to a depth of 20 cm. in places), practically wiped out the bean crop. Smuts are quite common, and some entire fields

become infested. The germinating and sprouting seeds are subject to attack by ants, grubs, and birds; and the growing plant is cut and undermined by rats, mice, rabbits, gophers, and ground squirrels (especially the last two) who also nibble on the young leaves. On rare occasions locusts invade the area. However, there has not been an extremely bad famine year since 1892, although 1894, 1897, 1902, 1907, 1909, 1917, 1920, 1929, 1932, 1933, and 1939 had very poor harvests.

Methods of storage vary extremely. Usually the maize is stored on the cob, and only as much is shelled daily as is needed for domestic food, sale, or feed for horses and mules. Small farmers, and those families which have to purchase all of their maize, often store the ears in a corner of the main room (living room) or in a chest in the same room. More common is storage in the attic or half story (*tapanco*) above the main room; this is especially common in the ranchos. An uncertain but considerable number of families have a formal granary (*granero* or *troje* in Spanish, *cencalli* or *cincalote* in Mexicano, *marita* in Tarascan) which is in the group of structures on the *solar* and may be a separate small building or a room of the house. A few of such granaries are in the form of the Sierra Tarascan *troje*, but more often they approximate the architecture of the house with adobe and stone walls and roof of tile or shake. A few of the slat-sided or crib type of granary (*tziricua* in Tarascan), such as are common in the State of Mexico, were seen, but they are rare and apparently temporary. No square or cylindrical *cincalotes* on legs (such as occur in Guerrero) or vasiform *cuescomates* (of the Morelos type) were noted. However, Gilberti (1559) gives the word *tsirimba* for a *troje* on four posts. When the ears are shelled the most common implement, at least in the ranchos, is the *olotera* or disk of corncobs tied together. Seed merchants and grocers commonly keep the shelled maize in wooden bins which only rarely are lined with metal. There is a very considerable loss of both shelled and unshelled maize from the depredations of beetles, weevils, ants, rodents, etc.

The statistics of production are highly unreliable. We first attempted to find out the area and amount of maize planted. There are about 1,100 hectares of land which are planted to maize and/or wheat. This hectareage is cut down by the amount left fallow each year. Perhaps 775 hectares are planted to maize each year—350 in

the region around Quiroga and 425 in the ranchos and on the *ejido*. Some estimates run above 1,000 hectares, but we doubt this figure. We obtained from all the farmers in the ranchos (with the exception of Zirandangacho) the amount of maize that they planted in 1945. This figure was always given to us in liters of seed planted. Since the concensus in the area was that 20 liters of maize were planted to the hectare we divided the sum of 7,006 by 20 to obtain 350 hectares for the five ranchos. The figure for the lowlands was obtained by observation and guesswork. The variables in determining the area are the amount of land left fallow, and the amount of seed used per hectare. Although we obtained figures ranging from 5 to 24 liters of seed per hectare, most of the farmers agreed on a figure around 19 or 20 liters. The next step in determining production was to obtain the rate of yield, since the outright statements of production either were lacking or were not creditable. Here the figures were very variable and ranged from less than twentyfold to more than two hundredfold, with most of the estimates falling between thirtyfold and eightyfold. We estimated the average yield at sixtyfold, although some of the better informed farmers and businessmen insisted that it was only fortyfold. It is probable that the volcanic ash fertilization of the area (from Parícutin) since 1943 has improved production to an extent not yet realized by many of the inhabitants. Again, there is always the possibility that the yield was estimated low because of the habitual distrust of outsiders. Accepting a planting figure of 20 liters per hectare, the average production per hectare would be between 800 liters (8 *fanegas*) and 1,200 liters (12 *fanegas*). These figures can be compared with ranges between 1.5 and 35 *fanegas* per hectare on different types of land in Cuitzeo, Charapan, Cherán, and Tzintzuntzan. Using the figures of 775 hectares of maize land and an average production of 12 *fanegas* per hectare we obtain a total production of 9,300 *fanegas*; and using other figures supplied by citizens of Quiroga we obtain a production varying from 6,200 to 8,800 *fanegas*. The local figures are undoubtedly too small, and we are inclined to believe that our figures should be raised somewhat in terms of an average production of more than 12 *fanegas* per hectare. However, this is all guesswork. Another approach to the matter is through the local annual consumption of maize. In normal years there is

both import and export of maize from the Quiroga area. This is complicated by the fact that Santa Fe, San Jerónimo, and San Andrés market part of their maize crop in Quiroga. We are not certain that our area of study is normally self-sufficient, and it is quite possible that maize from the good lands of the Llano de Tzintzuntzan near Patambicho and the Llano de Santa Fe fill out the deficit, together with some ordinary maize and a little popcorn from other parts of Mexico.

We estimate the annual consumption of maize in Quiroga and its ranchos to be between 12,000 and 13,000 *fanegas* of dry shelled maize. This figure was obtained in the following fashion. We obtained a figure for the average amount of dry maize (in liters) ground daily from every one of the 168 households (representing 998 persons) in the ranchos. This amounted to 1,009 liters a day, or 1.01 liter per person daily. Consumption actually ranged from as little as 0.5 liter to 2.5 liters per adult, with most of the 439 children eating a little less than a liter and the adults eating somewhat more than 1 liter. We did not make such a complete census in Quiroga town, but we obtained estimates from the two maize mills (*molinos de nixtamal*) where 214 to 307 of the 629 households had their *nixtamal* ground daily into *masa*. The Torres mill figured 5.6 liters of equivalent dry maize per household (the households in Quiroga average five persons each) which amounted to 1.1 liter per person—a figure very close to that which we obtained from the ranchos. The Torres mill, however, is situated where the majority of its patrons are not eaters of wheat bread. The Fuentes mill figures worked out to 0.74 liter per person, but many of its patrons ate wheat bread at one or more meals daily. The 1940 census showed that 84 percent of the people in the town of Quiroga ate no wheat bread. Probably by 1945–46 this figure had decreased to about 80 percent, which estimate is based on examination of the current civil register records where this item is now included in the various forms. In addition we sampled 50 households in the peripheral Calvario district (where nearly all grinding is by metate) which yielded an average of 0.80 liter per person; 20 households in the central part of town (where grinding was evenly divided between mill and metate), which had an average of 0.753 liter per person; and 14 households in the central district (which had all their

maize ground at the mill), where the average consumption was but 0.378 liter per capita. In the light of these various returns we assigned 50 percent of the town's population to the rate of 0.801 liter (this group is composed of farmers and day laborers who eat no wheat bread but who cannot afford to eat as much maize as do the *rancheros*); 30 percent were assigned to the rate of 0.753 liter (this group is mainly composed of wealthier farmers, artisans, and small merchants who eat no wheat bread but who can afford a wider variety of food than the previous group); and 20 percent were assigned to the rate of 0.378 liter (this group comprises all of the wheat bread eaters who tend to be the wealthiest artisans, merchants, governmental employees, and the like). It must be kept in mind that even the wealthiest of Mexicans in the rural regions eat tortillas at one or more meals, even though they may be listed as eaters of wheat bread. The above figures provide the totals of consumption as follows: ranchos, 3,683 *fanegas* a year, Quiroga "poor," 4,614 *fanegas*, Quiroga "intermediate," 2,602 *fanegas*, and Quiroga "relatively rich," 876 *fanegas*, for a grand total of 11,775 *fanegas* of dried maize ground into *masa* yearly. This *masa* or meal dough (used in tortillas, tamales, *atoles*, stews, etc.) constitutes the chief form of maize consumption. The other forms in which maize is consumed (roasted, boiled, *pozole*, *pinole*, etc.) amount to but a very small part of the total. *Pozole* and *pinole* are *fiesta* dishes usually purchased in the plazas, and boiled or roasted ears constitute the chief use within this group. We would guess that maize consumed in these forms does not amount to more than 5 percent (in equivalent dry kernels) of the maize converted to *masa*. This estimate would give a total annual maize consumption of 12,364 *fanegas*. It is extremely doubtful that the Quiroga consumption would exceed 13,000 *fanegas*.

Considering the variables in the estimates of acreage and production, it would be a waste of time to go deeply into the economics of maize raising. We sampled a number of farmers and their parcels as to costs and incomes; but it was impossible to rely on their information, our own observations were not complete enough, and the samples did not cover all the variations in rotation systems, quality of soils, ability of the farmers, sizes of parcels, types of landholding or land use

(absentee landlord with mayordomo, various types of *medieros*, *ejidatario*, etc.), sizes of farming families (i. e., labor resources), and other important factors. It would be misleading to present conclusions for all of the Quiroga area on the basis of our samplings which incompletely covered only some 130 farmers. However, for whatever it is worth, we will summarize the results of our observations and interviews with farmers. There were approximately 350 farmers (owners, renters, and *ejidatarios*) who planted maize in 1945. The amount planted by each farmer varied from less than 0.2 of a hectare to more than 25 hectares. Both the median and the modal acreage planted to maize was 2.5 hectares, i. e., the typical or normal farmer cultivated 2.5 hectares of maize in 1945. What the average was we are not certain—probably somewhere between 2.2 and 3.0 hectares, and most probably closer to the first figure. The modal, median, and typical maize farmer spent about 50 days of labor per hectare (everything from *barbecho* to harvesting), which represents 125 man-days for the typical farm. Probably 70 to 80 of these man-days were provided by the farmer himself and members of his family, and the remaining 40 to 50 man-days were provided by hired labor. The average cost of farm labor per day in 1945 was \$2. Seed maize, if retained by the farmer from his previous harvest, cost him merely its nominal value. During the year there is considerable fluctuation in maize prices (highest just before the harvest and lowest during and just after the harvest), but an average of \$21 wholesale (from farmer to merchant) and \$23 retail (from merchant to consumer) a *fanega* obtained during most of 1945. Prices went up 2 centavos a liter in the winter of 1945-46. At 20 liters of seed per hectare the seed would be worth about \$4.20 per hectare or \$10.50 for the 2.5 hectare parcel. The amortized cost or value of equipment used in a year (plow, yoke, harness, machete, etc.) probably would not amount to more than \$9, which includes the depreciation due to use on other crops besides maize. About 80 percent of the proprietary farmers own at least one yoke of oxen, nearly 30 percent own two or more yokes, while practically all of the sharecroppers must rent work animals. Work oxen commonly rent at \$4 a yoke per day plus their food. The typical farm owner probably rents oxen for the equivalent of 25 yoke-days, which

would amount to \$100 ox rental for the maize season. The typical farm owner also owns one or two burros and/or horses, and has no need to rent these animals. The typical cultivated parcel probably is listed on the tax rolls as *temporal de segunda*, valued at \$80 a hectare, and the total annual taxes will amount to \$3.38 for the 2.5 hectare parcel. There is little point in considering capital investment (the real sales valuation of the land) and return or interest on the investment since (a) it is exceedingly difficult to obtain the sales valuation, and (b) the farmer does not think in such terms. Actually he is inclined to think of his returns on an annual basis and in terms of how much maize he has left for himself after paying maize (or cash equivalent) for hired labor, rental of animals and equipment, and whatever else called for immediate expenditures. His time, and that of members of the family, and the value of his land, animals, and equipment on hand, do not enter into his accounting. Roughly, expenditures and returns per typical hectare and parcel of 2.5 hectares might be as shown in table 27.

TABLE 27.—Expenditures and returns per typical areas

Area	Hired labor	Home labor	Seed	Depreciation of equipment	Ox rental	Taxes
1 hectare.....	\$40	\$60	\$4.20	\$3.60	\$40	\$1.35
2.5 hectares.....	100	150	10.50	9.00	100	3.38

Area	Estimated costs	Production	Value of crop	Cash net ¹	Total net ²
1 hectare.....	\$149.15	<i>Fanegas</i> 12	\$252	\$170.65	\$102.85
2.5 hectares.....	372.88	30	630	426.62	257.12

¹ The cash value of the maize crop minus expenses of hired labor, rented animals, and taxes.

² The cash value of the maize crop minus all estimated costs. In addition the farmer will profit on beans and pumpkins interplanted with the maize, *cloches* taken out before the main harvest, and the *rastrojo* fed to his own animals or sold.

WHEAT

Common wheat (*Triticum vulgare* Vill. or *Triticum aestivum* L.) is the second field crop by acreage and is the leading cash crop since the majority of the farmers do not eat wheat bread but sell their entire harvest to the local flour mill. Mediterranean or turgid type wheat was being cultivated in the Pátzcuaro Basin before 1534, and has continued to be highly important throughout most of northern Michoacán to the present day. During the entire colonial period Michoacán

was considered to be the most fertile wheat-producing area in Mexico. One of the two oldest wheat mills in Michoacán was located in the Pátzcuaro Basin and this mill (on the site of the present mill of San Rafael or Chapultepec about 7 or 8 miles southeast of Quiroga) was visited by Ponce (1872) in 1586, who said that it ground all the wheat of the lands around the lake. He went on to say (vol. 57, pp. 537-538) that there was much wheat and of a very good quality, especially one strain known as *siete espigas* (seven ears or spikes). We were unable to find this term employed at the present time. All the wheat that we saw was of the semihard turgid floury type grain. Locally the forms are known by differences in color (red and white), bearded and beardless, and according to planting season (summer, fall, and winter). All combinations among these three classificatory groups are known, but the principal wheat is a red (*colorado*) bearded (*barbón*) wheat planted in the fall (*aventurero*). White wheat (*trigo blanco*) constitutes a very minor fraction of the wheat produced, and little of it reaches the mill. Beardless wheat (*trigo pelón*) is not favored because it is more subject to attack by birds, and a strong wind will cause it to shatter more than the bearded wheat. Only a little wheat is planted in the winter (*trigo de la rosa*), in November and December, on the richer and moister soils of the lowlands and the *joyas* of the highlands after the fields have been cleared of maize and beans. This later wheat is harvested in May and June, about 40 days after the main wheat harvest. An even smaller amount of wheat is planted during the summer rainy season (*trigo de las aguas*), and this is harvested in December and January. We heard of a bearded *palmillo* wheat, but were not able to fully identify it.

Wheat suffers by comparison with maize as to uses made of it in the area. Although about 12,000 44-kg. (about 100 pounds) sacks of flour are milled in Quiroga each year, there is relatively little consumption of wheat in any form. Only about 160 or 170 families (20 percent of the population) commonly eat wheat bread in any form—French rolls, small sweetened breads (*pan dulce*), cookies, biscuits, crackers, etc. Furthermore, all who use wheat bread also use maize. There is occasional use of the meal of white wheat, ground on a metate, in thick tortillas (*gordas*) and *atoles*. Most of the straw is used to feed livestock,

but a little is used in the making of fire tans and comparable items.

Wheat is raised principally on the slopes around Quiroga and in the ranchos, and most of it follows a period of fallowing. The most common cultivation sequence commences with an initial plowing (often followed by a *cruza*) between the middle of August and the middle of September. Then, in September and October, the field is sown broadcast by strips, the wheat seed is plowed under, and a small log with branches (commonly oak or hawthorn) is dragged over the field to break the clods and harrow in the seeds. This manner of seeding is quite inefficient and wasteful. The wheat sprouts in about 2 weeks. Nothing more is done by the farmer until the reaping period, which normally commences in the first week of April. Most of the wheat is reaped and threshed by the end of April. Two or three men commonly will cut a wheat field, working at the rate of 7 to 12 man-days per hectare, depending on the density of the wheat growth. Each man is equipped with a short-handled crescent sickle or *hoz* (usually with sawteeth, which are added to the purchased *hoz*), and with this he moves slowly down a swathe (*melga*, three to four paces wide and the length of the field) in back-breaking bent-over position, cutting the wheat plants handful by handful. Several handfuls of wheat are piled in a heap or *navilla* and later about every six *navillas* will be gathered and tied into sheaves or *manojos*. The *manejo* is tied with two knotted lengths of wheat. Reapers are paid by the *melgar* and may earn as much as \$2.25 a day. Immediately after the reaping the sheaves are brought to a threshing floor and the wheat is threshed, sacked, and packed by animals to the mill or a granary. If the field is customarily planted to wheat there will normally be a permanent slab-paved threshing floor (*era*) at some centrally located unplowed spot or at the margin of the field. Otherwise a temporary *era* will be constructed by shoveling off the loose earth from a polygonal area about 8 meters in diameter, tamping the earthen floor, placing a guard or edging of stone slabs, erecting the necessary corner posts, and stringing one or two ropes around to keep the threshing animals from straying. Most of the *eras* we saw were nine-sided, and could hold from 4 to 12 animals (usually horses and mules—but there are very few mules in the Quiroga area). The average threshing unit con-

sists of two men, four animals, one pitchfork, and one spade. The animals, if rented, cost \$1.50 per day. A unit of four animals or *bestias* can stomp out three threshings (*tareas*) of 40 *manojos* each in one day. Each *tarea* yields an average of 1.0 to 1.3 *cargas* (a *carga* is 161 kg. or 210 liters) of grain. On some small holdings the wheat is threshed with flails, but that method is quite rare in the Quiroga area.

The statistics on wheat production are even more elusive than those for maize. Farmers planted between 8 and 50 liters per hectare, with the mean running about 26 liters. Yields ranged from 2- to 4-fold on poor land, through 8- to 12-fold on intermediate land, to 30- to 44-fold on the best lands. The average would fall between 10-fold and 22-fold, but we are unable to be more precise. State statistics claim that in 1883 (when the soil presumably was somewhat richer) the yield was 12- to 15-fold, and the current consensus is that the average yield is only 5-fold. Our slightly informed guess is that the average yield was about 12-fold in 1945. On the basis of 26 liters of seed per hectare this would amount to a production of 312 liters, or a little less than 1.5 *cargas* a hectare. The slopes were said to produce 1 *carga* and the bottom lands 2 *cargas* a hectare. Probably such low yields represent only a poorer than average year. In a normal year the average production probably would run between 2.75 and 3.25 *cargas* a hectare. The Mexican average is 4.8 *cargas* a hectare. At least 100 farmers in the ranchos plant wheat, for a total of between 250 and 300 hectares. Perhaps another 50 farmers raise wheat on some 200 hectares in the lowlands—including irrigated fields near Zirandangacho and *solares* in town. The total Quiroga production in a normal year should amount to about 1,350 *cargas* (216,000 kg.), with annual fluctuations between 750 and 2,000 *cargas*. In 1944 a *carga* of wheat sold for \$48, but before the end of 1945 a *carga* was selling for \$56.50 up to \$57.75 at the mill. Where the farmer formerly had purchased seed wheat for about \$50 a *carga*, it advanced to \$58.80. Apparently Quiroga and its ranchos normally supply only a minor part of the 9,248 *cargas* milled annually in Quiroga, and the remainder comes from the rest of the municipality, from Tzintzuntzan, other parts of Mexico, and even from the United States. The net income of the wheat farmer per

hectare (computed in the same fashion as for maize, but not charging for taxes and equipment depreciation which were wholly deducted previously) probably amounted to about \$50 on the average in 1945, and about two to three times that amount in normal and good years.

HABAS OR BROADBEANS

Habas, known in English as horsebeans, broadbeans, and Windsor beans, were introduced by the Spaniards in the first few years after the Conquest. These large beans or vetches (*Vicia faba* L.) are native to the Mediterranean region, and are the classic beans of occidental culture which dominated before the introduction of the New World kidney bean. Because *habas* nitrify the soil, are not so demanding of the soil as maize and wheat, and because they can be grown under cool to cold conditions in the highest cultivated fields, they have become an important field crop in the highland areas of Michoacán. In the Quiroga region most of the *habas* are raised in the highland ranchos, especially in Icuácató and Sanambo. Several varieties are cultivated, which differ principally in the color of the bean, size of the bean, and length of the fruit or pod. The most common form grows to a height of about a meter, is quite leafy and produces a good hay, and has a fruit from 10 to 15 cm. in length and a large thick angled and compressed seed normally brown in color. The Tarascan name for this bean is *castillapu cocotsi* which means Spanish scarlet runner bean because of its nearest native counterpart in size and its introduction. The *haba* is not much consumed locally excepting on certain feast days from Christmas to Easter and during Lent. One of the more common dishes is boiled cold *habas* eaten individually with a dusting of sweetened *pinole*. Apparently the bulk of the *habas* is shipped out, and the hay is fed to livestock—although *haba* hay is extremely susceptible to attack by "worms." For about 15 years until recently the acreage planted to *habas* decreased steadily and was less than that of kidney beans, but a rejuvenation of the upland soils with volcanic ash from Parícutin has caused a considerable expansion, beginning in 1943. At present *habas* are planted on from 250 to 400 hectares each year, which places them ahead of kidney beans. In 1945 there were about 160 hectares of *habas*

harvested in the ranchos and perhaps 90 more on the slopes or *laderas* near Quiroga.

Although there is some winter planting for a spring harvest, most of the *habas* are planted in May and June with the first rains and are harvested from November into January. Preparation of the field is much the same as for maize. The seeds are planted in a furrow, one or two at a time spaced either every 20 cm. or 40 cm. according to the nature of the soil. The amount planted to the hectare varies from about 48 to 100 liters. Cultivation ranges from a slight weeding to several *escardas* done by hand. Harvesting resembles that of wheat. Men cut the plants near the ground, tie them into large bundles or shocks known as *tercios*, and pack them on their backs to the threshing floor. The typical *era* is a shoveled and swept hard dirt floor usually 6-sided and about 4 paces on the side. Six forked posts support poles which are tied in place with withes, although rope is sometimes used for the corral. Such an *era* can hold up to 12 horses, but the most common number is 8 or 9 tended by 1 man. A unit of three men (two bringing in the *tercios*), nine *bestias*, a pitchfork, a shovel, and a brush can thresh, winnow, and sack about 14 to 15 *cargas* (200 liters to the *carga*) or 20 sacks a day. After the beans have been stomped out, the horses and hay are removed from the floor, fragments of pods and chaff are brushed away, and the beans are winnowed by shoveling into the air. Usually there is ample wind in the highlands at this season. Yields run from 20- to 50-fold, the average being close to 50-fold at present, while a few years ago it was less than 20-fold. However, there is a very high loss from shattering in the field and poor threshing. After the threshing, the people of the rancho glean, after which there is a celebration or *fiesta* at night in the field. At present a hectare will produce from 12 to 25 *cargas* of *habas*, and the average probably is around 15. At harvest time *habas* sold in Quiroga in 1945 for \$15 a *fanega* or \$30 a *carga*. Where formerly the *haba* farmer might take a loss, he now may net \$100 to \$300 a hectare. The farmers, however, deny this and claim but a minimal profit.

KIDNEY BEANS

The traditional Mexican accompaniment of maize is *frijoles*, which term is used only for beans of the genus *Phaseolus* and usually for the kidney

bean or *Phaseolus vulgaris* L. The kidney bean, in its multitude of little-studied forms, is a native of Latin America and probably of the northern portion in Mexico and Central America. In addition to the kidney bean the prehistoric peoples of Mexico cultivated the scarlet-runner or multiflora bean (*Phaseolus coccineus* L. or *Ph. multiflorus* Willd.), the tepary bean (*P. acutifolius* Gray), the small lima or sieva (*P. lunatus* L.), and the *frijolillo* bean (*Canavalia villosa* Benth.). In the Tarascan region of Michoacán at the time of the Conquest there is mention only of red and black beans (Relación de Michoacán) which would indicate that the two predominant types that attracted the attention of the Spaniards were the kidney bean (red to light buff in color) and the scarlet-runner bean (nearly black with red markings). However, there are black and speckled forms of the kidney bean, brown and red and speckled variants of the small lima bean, and brown and black types of the tepary bean, and the bean of the *Canavalia* may be red, brown, or white. Apparently we can be certain only that white forms of the various species were absent or rare. Practically all of the native beans raised in Quiroga were kidney beans, although we saw some cultivated scarlet-runner beans (*cocoche*, *cocotzi*, *ayacotli*, *ayecocimatl*, and *cimatl*). There are at least two well-recognized forms of the scarlet-runner bean, which are more commonly raised in the Sierra Tarascan pueblos and in the States of México and Guerrero than in the Pátzcuaro Basin, although we collected what appeared to be a wild *Phaseolus multiflorus* in the Quiroga area. There is no present cultivation of the tepary and *frijolillo* beans, although both are wild in the area and sometimes are gathered. Of the minor species cultivated perhaps there were more small white limas than the large purplish-black scarlet-runner. The various species other than the kidney bean were more commonly planted in the *solares* than in the fields. The kidney bean is represented in Quiroga by some six well-marked types each of which contains several subtypes according to size, color, and markings. The terminology for the many varieties represented is quite variable and confusing, and we obtained such contradictory names in different parts of the area and from different people within the same rancho that we are certain only of the names of the principal forms. Probably more than 90 percent of the

kidney beans planted in the fields fall within the type or group known widely over Mexico as *frijol bayo*, which ranges from gray and yellow through buff (yellowish-orange) to light-brown and pinkish in color. The most common color is a clear yellowish-orange, and speckling or spotting never occurs in any of the forms. There are two common sizes—a larger or *gordo* and a smaller or *delgado*. Minor types, varying in form, size, and coloration, include black, white, red and spotted beans which go under such names as *prieto*, *negro*, *paloma*, *palacio*, *colorado*, *criollo*, *rosa de castilla* (a former place name southeast of Cuenembo), and *pinto*. The terms *judia* and *alubia* are synonyms for *frijol*, but sometimes are affixed to particular forms.

Beans are the second most important element in the diet of all but the very poorest who cannot afford *frijoles* commonly and must content themselves with tortillas, *atoles*, and chiles. Kidney beans are boiled or stewed, or cooked in lard; and boiled beans are sometimes mashed or ground to a paste which is used in filling tamales. At times the bean paste will be sweetened. Also, there is considerable consumption of green or snapbeans (*ejote*, from *etl* the general Mexican name for bean). The bean straw or hay serves as fodder.

All of the field beans are planted with the maize, commonly one or two beans in each hill. The entire cultivation process for the maize naturally includes the beans up to the time of harvest. Beans may be harvested either just before or just after the maize harvest, and harvesting is almost invariably done by women and children. After the *ejotes* have been gathered off the vine, the bean plant is cut off near the base and the plants are stacked in some part of the field. Until the nineteenth century obsidian or *zinapu* knives were used for cutting, but now steel knives are used. The bean plants are piled on a mat and flailed until the beans have been disengaged from the pods. Then the beans are winnowed from the chaff and carried home in baskets, *ayates*, and sacks. Some of the rancho farmers thresh their beans in the same fashion as they do *habas*. Our account of harvesting procedure is based on hearsay. Most of the 1945 crop of beans was lost because of a severe hailstorm which followed a series of diseases and insects which had attacked the roots and leaves.

Commonly 200 to 300 hectares of maize are interplanted with beans each year, which acreage

is about evenly divided between the ranchos and the area around Quiroga. Only about half of the farmers (55 percent) plant any field beans, and usually not all of the maize acreage of these farmers is interplanted with beans. The farmers plant from 5 to 15 liters a hectare, with an average of perhaps 8 liters. The yield varies greatly, ranging from 5-fold to nearly 50-fold, with a mean of possibly 18-fold. The returns per hectare vary from as little as 25 liters to more than 700 liters, with the average falling somewhere between 150 and 250 liters. It is impossible to determine what the average total production of kidney beans is in the Quiroga area other than that it is between 30,000 and 75,000 liters and probably not more than 45,000. The income from beans cultivated with maize is nearly net other than the cost of the seed and the labor which is usually provided by members of the family. In 1945 beans were valued at about 30 centavos a liter.

BARLEY

Barley (*Hordeum vulgare* L.) is the fifth field crop by area planted, but it is a very minor crop commonly planted only in Sanambo and occasionally in the other ranchos of the *tierra fría*. In 1945, 10 Sanambo farmers planted 505 liters of barley on perhaps 20 hectares of land. It is claimed that the normal planting is 3,000 to 4,000 liters. We obtained no information as to cultivation and harvesting other than that it was very similar to wheat. A normal crop may run about 500 kg. per hectare.

OTHER FIELD CROPS

Some cucurbits are interplanted with maize but most of their production is on *solares* and is discussed later. Alfalfa or *lucerne* (*Medicago sativa* L.) is planted on a few fields in town and in Zirandangacho. Nearly all of it is under irrigation, but there are not more than 4 hectares in total. Before the last revolution there was at least 10 times this acreage planted, principally by two men in the Quiroga lowlands. In the nineteenth century the Quiroga area was well known for its production of lentils or *lenteja* (*Ervum lens* L.) which the Tarascans call Spanish beans (*castillapu thatsini*), but there is no field cultivation of it now and it is rare in the *solares*. Apparently there never was cultivation of oats and rye in the area. Flax or *lino* (*Linum usitatissi-*

mum L.) and hemp or *cañamo* (*Cannabis sativa* L.), have not been important since colonial times, and at the moment are not cultivated in the area. Chickpeas or *garbanzos* (*Cicer arietinum* L.), grass pea or *arvejón* (*Lathyrus sativus* L.), and field peas or *chicharos* (*Pisum sativum* L. var. *arvense* Poir.) were cultivated from early colonial times into the late nineteenth century, but they occur now only sporadically in *solares*. The Mexicans have never taken to the flavor of these Old World legumes. A few of the more advanced and experimentally inclined farmers have planted some sorghum—known as *sorgo* and *maíz de castilla*—(*Holcus sorghum* L.), but only a few plants of the *durra* variety were seen.

GARDEN CROPS

Garden crops comprise those plants, chiefly vegetables, which are raised on the outskirts of town (as above the springs of Tepóricua), in vacant *manzanas* within town (chiefly in *cuartel* I), and on the house plots or *solares* in town and in the ranchos. Practically all are irrigated, either by ditches from springs and hydrants, or by hand with *latas* and *ollas*. We were able to determine something of the incidence of the various plants, but could form no estimates of production excepting that the Quiroga area produces no vegetable in quantity large enough to supply local demands excepting pumpkins. The deficit in most vegetables is supplied by Santa Fe, Tzintzuntzan, Chapultepec, San Jerónimo, San Andrés, and Chucándiro. There are only four commercial truck gardens in Quiroga, and these do not total more than 2 hectares. The principal garden vegetables are beets, cabbages, carrots, chayotes, chile peppers, coriander, lettuce, onions, green peas, potatoes, pumpkins, radishes, tomatoes and husk-tomatoes, and turnips. Of these vegetables the majority of the native chayotes, chile peppers, and pumpkins are raised in the *solares*.

In terms of acreage and bulk of production the leading vegetable is the pumpkin, but this term includes several species of the genus *Cucurbita*. These cucurbits are used as human food (stewed, candied, baked, etc.), the seeds of some are roasted and eaten like sunflower seeds or peanuts (formerly an oil was made from the *pepitas*), the vines and fruits are fed to livestock, and some are grown as ornamentals. According to sixteenth-century sources the Tarascans recognized at least eight

kinds of "pumpkins" which probably represented four species of *Cucurbita*, a *Lagenaria*, a *Crescentia* (not a cucurbit but a bignonia, the calabash tree or *cirián*), and one or two wild *Asclepias* (milkweeds) whose fruits are collected wild and eaten like young pumpkins. The early Spaniards termed everything that looked like a gourd a *calabaza*, although they sometimes termed the edible gourds *melones*. The identity of the various cultivated *Cucurbita* is more confused even than is true for New World beans, and scores of Spanish, Mexicano, Tarascan, and other names are current for the cultivated *Cucurbita* in southern Mexico. Apparently the general term for pumpkin is *calabaza* in Spanish, *ayotli* in Mexicano, and *purú* or *puruan* in Tarascan. The truly indigenous pumpkin is the field pumpkin (pie pumpkin, summer squash) which is *Cucurbita pepo* L.; and which is known locally as *calabaza*, *calabaza común*, *calabaza corriente*, *calabaza india*, *calabaza amarilla*, *coztic-ayotli*, and *purú*. This is the pumpkin most commonly interplanted with maize, and is also the leading pumpkin in the *solares*. It is this pumpkin which produces nearly all of the buds, flowers, and young fruit (*calabacitas*) which are so esteemed locally. It is gathered from August to December. Next is the fig-leaved pumpkin (*Cucurbita ficifolia* Bouché), also a native of Mexico but apparently introduced to the Tarascans through the Mexicans since the Tarascan name *tikatzi* sounds very much like an adaptation from the Mexicano *tzilac-ayotli* (smooth-skinned pumpkin) which modern Mexicans have corrupted into *chilacayote*. This may be the *calabaza dura* (hard pumpkin) of the literature which we have not identified, since it has a hard gourdlike rind. Many people call it *cidracayote* and confuse it with the "citron" or white-fleshed watermelon (*Citrullus vulgaris* Schrad.). Neither the white nor the pink-fleshed watermelon is cultivated in the Quiroga area although it is known and consumed under the Spanish name *sandía* and the Tarascan name *itzi-purú* which means literally "water-pumpkin." The *chilacayote* usually is planted in May and June and is harvested from September to January. Commonly it will be picked in September and October and placed on the gently sloping roofs to mature. The fruit is normally oval with a green rind striped with white, and contains a white flesh and seeds which vary from white to black. The

chilacayote macho has black seeds and a very fibrous flesh which is prized for cooking with brown sugar to produce a *dulce* or candied dessert. A less fibrous and sweeter form, *chilacayote calabazo*, with black and with white seeds is cooked like ripe pumpkin. Another native pumpkin is the *puruan-zecua*(?), *talayote*, or *calabaza tamalayote*, which we know as the musky pumpkin, cushaw, and winter crookneck (*Cucurbita moschata* Duch.). This pumpkin is raised only in the *solares* and is not very common. A prized but not commonly raised pumpkin (really a squash) is the South American *Cucurbita maxima* Duch., which was introduced by the Spaniards and is known as *calabaza de castilla* and *calabaza turbante* and improperly as *ayotli* and *tamalayota*. This is the species to which belong our autumn and winter squashes, Hubbards, Mammoth Chilians, and Turbans. Various strains of this species are cultivated, and often they are planted in January and February and harvested in May and June. Probably the native Mexican *Cucurbita mixta* Pang. is present but we were not able to identify it. Nor were we able to identify the pumpkins known to the Tarascans as *tzopome* and *itzuz*. The related calabash gourd (*Lagenaria vulgaris* Ser., *Lagenaria siceraria* (Mol.) Standl., or *Lagenaria leucantha* Rusby) was known to the prehistoric Tarascans, and water bottles (*guajes* or *bules*) of this gourd are used in Quiroga, but all are imported. Tarascan names for the bottle gourd include *ihuan-itzuz*, *xuren*, and *timapo*.

The next most important plant in the *solares* is the chayote (*Sechium edule* Swartz.) which is also a native Mexican cucurbit known to the Tarascans as *apupu* and *apupio*. It is a perennial which produces both fruits and tuberous roots for 6 to 8 years. Although it can be planted at any time of the year, usually it is planted between October and March. A hole is dug in the yard and an entire fruit is planted. Then a protective cage and trellis is constructed of poles which keeps animals from damaging the growing plant and gives support to the multitudinous ramifications of the vine. Some fruit is gathered about August of the first year of planting, but the crop is not important until the second year when harvesting goes on commonly from July to December. The fruits are somewhat pear-shaped, 10 to 20 cm. in length, with a greenish wrinkled and furrowed skin, and contain one large flat seed. In the

second year can begin the collection of some of the minor tuberous roots (*chinchayote*, *guarás*) in December and January, but the large roots are not gathered until the plant has seen its best producing days and is cut down. Chayotes are not so common in Quiroga as in many other parts of Mexico and we counted only 230 plants in 101 *solares*. Both the chayote and the *raiz de chayote* are cooked and eaten as vegetables, but they are always considered as something of a delicacy. The chief source of outside supply is Santa Fe, whose women sell the cooked fruit and root in the Quiroga plaza.

The third most important vegetable of the *solares* is the chile pepper in several of its many varieties. *Chile* or *ají* (*chilli* in Mexicano and *cahuás* in Tarascan) can be lumped in one species *Capsicum frutescens* L., or divided into two or three species each with several subspecies. All of the chiles cultivated in Quiroga are of the annual type (*C. annuum*), and belong to the long (*C. longum*) and bell (*C. cordiforme* or *C. grossum*) subtypes. The chiles are green when immature, and are red or yellow when ripe. The most common forms raised are known by the names *perón* (also *amarillo* and *chilcoztli*), *jalapeño* or *mango*, and *pasilla* or *guajillo*. Also such names as *ancho*, *chipotle*, *poblano*, *mulato*, *verde*, and *seco* are encountered, which merely represent shape, size, maturity, color, and preparation of the above types. The ancient Mexicans recognized seven distinct species of which five seem to be present in Quiroga. Chiles are planted at various seasons of the year, most commonly in February, June, September, and December, and usually take 4 months to mature, after which the fruit can be harvested for about 5 months. The main chile harvest is through the months from June to December. However, probably the bulk of the chile consumed in Quiroga is imported from outside of the Pátzcuaro Basin.

The other important vegetable crops will be discussed briefly in alphabetic order:

Beets (*Beta vulgaris* L.), known locally as *acelga* and *betabel*. Quite minor. Roots and leaves used.

Cabbages (*Brassica oleracea* L.), *col*, *repollo*, and *zacua*. The general Tarascan term for an edible leafy herb is *zacua*. Common, in the form of kales, and white cabbages. Used in soups and stews.

Carrots (*Daucus carota* var. *sativa* DC.), *zanahoria*. Minor.

Coriander (*Coriandrum sativum* L.), *culantro* and *cilantro*.

A common flavoring for soups and stews.

- Lettuce** (*Lactuca sativa* L.), *lechuga*. Fairly common. More of the romaine than the head type.
- Onions** (*Allium cepa* L.), *cebolla* in Spanish, *zonacatl* in Mexicano, and *tsurups* in Tarascan. The Indians transferred their names for native wild onions. Common. Planted January-April, gathered June-August.
- Peas** (*Pisum sativum* L.), *chicharo*, *guisante*. Fairly common. Also field cultivated.
- Potatoes** (*Solanum tuberosum* L.), *papa*. Introduced by the Spaniards from South America so that the species cultivated in Quiroga probably is *Solanum andigenum* Juz. & Buk. var. *mexicanum* Buk., which reached Mexico from Peru or Colombia by 1570. Unimportant; used as a flavoring instead of a vegetable. Planted March-April, harvested July-August. There are several wild species of potatoes in the region.
- Radishes** (*Raphanus sativus* L.), *rábano*. Minor. The introduced wild radish is a common weed.
- Tomatoes** (*Lycopersicon esculentum* Mill.), *jitomate*, *toma cuaraki*, *zucupara*. Fairly common. Old unimproved strains. Used as flavoring, in soups and sauces.
- Husk tomatoes** (*Physalis* spp.), *tomate*, *toma*, *coztomate*, *tomatillo*, *jaltomate*, *miltomate*. Three or more species are cultivated. Common. The true Mexican tomato, used in the same way as the *jitomate* or navel tomato.
- Turnip** (*Brassica rapa* L.), *nabo*. Minor.

Present in a few gardens and *solares* but rare are such European vegetables as garlic (*ajo*), eggplant (*berengena*), mustard (*mostaza*), cucumber (*pepino*), leek (*puerro*), and purslane (*verdolaga*). No melons, watermelons, peanuts, sweetpotatoes, or *jicamas* are cultivated locally. It is hard to tell if the various *quelites* and *bledos* (*Amaranthus* spp.; and *Chenopodium* spp.), as well as *chias* (*Salvia* spp.), which can be seen growing in some of the *solares* are cultivated or adventitious. At any rate, they were cultivated in Quiroga well into the nineteenth century, and they are still collected for greens, grains, and oil. Amaranth or *bledo* is still raised in Santa Fe to provide grain for some of the special tamales. It is planted about April and is harvested in October. The small black and also white seeds of two or more species of *chia* are ground into meal for a drink (often an *atole*, mixed with maize meal), fed to caged birds, and oil is expressed for use in finishing some of the *bateas*. Castor-bean (*ricino*, *higuerilla*, *palma-christi*) and prickly poppy (*chicalote*) are no longer cultivated or gathered for commercial purposes, but their oil was sold out of Quiroga as late as the end of the nineteenth century. Also, a number of the field crops are planted in *solares*, such as colored maize (*maiz de colores*) which may be blue, red, or pinto; kidney and other beans; and some wheat and alfalfa.

A large number of ornamental, flavoring, and

medicinal plants are raised in the inner patio or part of the *solar* adjacent to the house. Even the homes of the very poorest, or those farthest removed from a supply of water, have a few plants—either planted in the ground or in a flowerpot that may vary from a formal terra-cotta pot or *maceta* to a tin can filled with earth. A full report on the Quiroga patio and its plants will be published at another time, and here we will present only a brief outline. Cultivated flavoring plants are chiefly of Old World origin, since the native plants are commonly gathered from the wild flora. The most important flavorings (in addition to chile, coriander, onions and garlic, tomatoes and husk tomatoes, mustard and leek already mentioned) are:

- Anise** (*Pimpinella anisum* L.), *anis*. Minor.
- Cumin** (*Cuminum cyminum* L.), *comino*. Minor.
- Dill** (*Anethum graveolens* L.), *eneldo*. Minor.
- Epazote** (*Chenopodium ambrosioides* L.). Fairly common; used to flavor beans.
- Fennel** (*Foeniculum vulgare* Hill.), *hinojo*. Minor.
- Laurel de comer** (*Litsea* spp.). Fairly common cultivated shrubs whose leaves are used for flavoring food. There are other wild and cultivated species of the genera *Sassafridium*, *Persea*, *Ocotea*, and *Nectandra*, (commonly known as some kind of *laurel*, *canelo*, or *aguacatillo*), whose leaves are used in the same fashion.
- Majoram** (*Origanum vulgare* L.), *orégano*. Fairly common. Much used, but most of it is brought in.
- Sweet marjoram** (*Majorana hortensis* Moench), *mejorana*. Common.
- Parsley** (*Petroselinum hortense* Hoffm.), *perejil*. Common.
- Peppermint** (*Mentha piperita* L.), *yerbabuena*, *menta*. Most widely cultivated.

An occasional garden may have basil (*albahaca*), caraway (*alcaravea*), celery (*apio*), sage (*salvia*), and thyme (*tomillo*), but these flavorings are not much used and most of what is consumed is brought in. Other favored flavorings such as cinnamon, ginger, and nutmeg are imported.

Hundreds of plants, both cultivated and wild, are in the local pharmacopoeia, and the majority of the plants used in folk medicine are gathered in the wild state. Nevertheless, a number of native and introduced plants which are cultivated or allowed to grow in the *solares* should be mentioned. Most of these plants are to be found mainly on the lands of herb doctors or *curanderos*, but a few are more widely distributed, such as rue and mayflower.

- Castor-bean** (*Ricinus communis* L.), *higuerilla*, *ricino*, *palma de cristi*. Common cultivated plant and escape; ornamental, economic, medicinal.

Chamomile (*Matricaria chamomilla* L.; *Anthemis nobilis* L.), dogfennel, mayflower, manzanilla. Second most common cultivated medicinal plant.

Chupire (*Euphorbia calyculata* H. B. K.), *chupirini*. Native to the Pátzcuaro Basin; planted along fences, as ornamental, and used for venereal diseases. Very common.

Datura (*Datura tatula* L.), *toloache*, *torescua*. Rare, but of many uses. Formerly important in native ceremonies and curations.

Horehound (*Marrubium vulgare* L.), *marrubio*. Common, mainly as a weed.

Lemon grass (*Cymbopogon citratus* (DC.) Stapf), *te de limón*. Rare.

Nurite (*Cedronella mexicana* Benth.; *Clinopodium laevigatum* Standl.; and possibly one or two other species), *noriten*, *te nuriten*, *te nurite*, *toronjil*. Mainly wild.

Opium poppy (*Papaver somniferum* L.), *adormidera*, *sharaka-tzitziki*. Rare.

Peruvian peppertree (*Schinus molle* L.), *pirul*, *árbol del Perú*. Only a few trees for ornament, and medicinal parts.

Rue (*Ruta graveolens* L.; *Ruta chalapensis* L.), *ruda*, *acuitze-huariracua*. The most widely cultivated medicinal plant in the Quiroga area; found in approximately 10 percent of the patios and *solares*.

Te de Huerta (not identified definitely). Fairly common.

Tepoza (*Buddleia sessiliflora* H. B. K.; *Buddleia parviflora* H. B. K.; and at least two other species), *tepozán*, *jara tepoza*, *tepuza*. Mainly wild, but fairly common in cultivation.

Tobacco (*Nicotiana rustica* L.; *Nicotiana tabacum* L.; *Nicotiana mexicana* Schlecht.; *Nicotiana glauca* Graham), *tabaco*, *andúmucua*, *sinchacua*, and other terms for the first three native tobaccos; *buenamoza* and *árbol de tabaco* for the last species which was introduced from southern South America. The *buenamoza* is cultivated as an ornamental and medicinal plant and has escaped. The three native tobaccos at present are rather uncommon medicinal plants. Formerly tobacco was a panacea, and was much used by the Tarascans, especially in chewed form. The number of synonyms for the above four species, and for the various parts of the plant and forms of use, is enormous. Probably tobacco was the most valued nonfood plant among the Tarascans. An entire book could be written on the history and uses of tobacco in Michoacán. The decrease in local cultivation was probably due to the missionaries, who associated tobacco with the pagan ceremonies of the Indians. There is only one small commercial planting on part of a *solar*.

Several hundred species of ornamental plants are grown in the Quiroga area. They include trees (such as the lovely frangipani or *cundahua*—a *Plumeria*, ashes, cypresses, jácaramdas, privets, and many others), shrubs and large climbing vines (such as bougainvilleas, poinsettias, daturas, yuccas, jasmines, palms, bananas, etc.), and a multitude of introduced and native flowering

herbs, ferns, etc. In this report we have the space only to mention the more important of the shrubs and herbs. Less than 15 percent of the houses and patios have no ornamental herbs or shrubs; about 50 percent have the ornamentals planted in the patio; and the remainder, about 35 percent, have plants in *macetas* and also planted in the patio. The flowerpots, commonly of crude terra cotta and varying considerably in size, are arranged around the patio, in the corridor or back porch, and on ledges and benches. Frequently small *macetas* with succulents, tradescantias, ferns, and other plants are hung from the rafters or *vigas* in the corridor. The most modest establishments may have only two or three planted pelargoniums; the typical home will have several potted pelargoniums, ferns, and begonias, and several ornamental shrubs planted in the patio—such as roses, bougainvilleas, yuccas, etc.; and the homes of the well-to-do convert the inner patio into a mass of potted plants and planted herbs, shrubs, and trees of great variety. The most common floral association is of *malvas*, *geranios*, and *helechos*. (See list below for the meaning of these names.) Often the *helechos* are supplanted by *begonias*, *claveles*, or *azucenas*. These plants, together with roses and bougainvilleas, make up more than 80 percent of all the ornamental plants cultivated in Quiroga. The local terminology is quite varied, and often differs greatly from that employed in other parts of Mexico known to us. In the following list the leading ornamental plants are arranged in the approximate order of frequency in the Quiroga area. The first native name given is that which is most commonly used. Wherever possible the plants have been identified exactly, but in some cases only the genus or even only the family could be determined. It is of interest that such native Mexican flowers as the dahlia, cosmos, zinnia, marigold, tiger flower, tuberose, lantana, four-o'clock, and morning-glory, are not important. Perhaps this is because most of them are so common in the wild state. Among introduced flowers it was surprising to us to note the comparative paucity of such as oleanders, gardenias, and camelias.

Malva and Geranio (*Pelargonium* spp.). What the Mexicans call a *malva* or *malvón* is not a mallow but a *Pelargonium*; and the *geranio* is not a member of the genus *Geranium* (with one minor exception) but is also a *Pelargonium* of South African origin. There seem to be 5 to 7 species, represented by strains with white, pink,

red, blackish-red, and mottled flowers. The best known *malvas* are *bola de fuego*, *viuda alegre*, and *picada*; and the prized strains of *geranios* are *tres piedras*, *rey de los negros*, *granduque*, *flite*, *payaso*, *camelino*, *holandés*, *luto de Juárez azalea*, *aviador*, *triumfo*, *japonés*, *jicote*, and *de cartón* or *de guía*. Several of the Mexican strains surpass in loveliness any of the "geraniums" that we have seen in the United States or South America. These pelargoniums (growing from the ground, climbing on walls and frames, or in formal banked rows of pots) dominate the floral landscape in the Quiroga homes. Somewhat more than half of the homes have pelargoniums, with the *malva* being 50 percent more common than the *geranio*. We were unable to distinguish between the two in many cases, but in general the *geranios* have a more brilliant flower and harsh crenulated leaves while the *malvas* are more commonplace and have softer velvety leaves.

Helechos (chiefly Polypodiaceae) include at least a dozen native and introduced ferns among which the most common are *chino*, *lacio*, *de la fuente*, *aliento de niño*, and *japonés*. It should be mentioned here that *chino* does not mean Chinese but curly or rough, and also pretty; and that *japonés* is often applied (for no reason known to us) to exotic plants which commonly are not of Japanese origin.

Begonia (*Begonia* spp.). There are at least eight cultivated species of begonia (some for their delicate flowers, others for the large and showy leaves), apparently all of them native to Mexico and some of them native and wild in the Pátzcuaro Basin. There are some 20 commonly cultivated and named strains among which the most important are: *Begonia gracilis* H. B. K. known as *carne de doncella* and *ala de ángel*; *Begonia incarnata* Link & Otto, also known as *ala de ángel*, and as *corazón de Jesús*; *Begonia imperialis* Lem., *begonia imperial* and *hoja elegante*; *Begonia fuchsioides* Hook., *corazón de María*; and others not identified specifically, such as *corazón de ángel*, *plateada*, *pantalla*, *primoroso*, *realzada*, *terciopelo*, *mulata*, *de la sombra*, *caracol*, and *china*.

Rosales (*Rosa* spp.) include four or five species and a number of hybrid roses among which the most common are *rosa de castilla* or cabbage rose (*Rosa centifolia* L.), *rosa de cambray* (*Rosa alba* L.), and *rosa te* or tea rose (*Rosa indica* or *Rosa odorata* Sweet). Red roses dominate; there are comparatively few white roses; and yellow roses are rare. Roses are the chief ornamental shrubs.

Camelina (*Bougainvillea glabra* Choisy and *B. spectabilis* Willd.), also known as *bugambilla* and *azalea de guía*. Both the purple (which is dominant) and the brick-red bougainvilleas are raised in Quiroga. These two South American climbing shrubs are great favorites, and may be seen on trellises, trees, and walls.

Azucenas comprise many species and several genera of lilies and amaryllises. The most common forms are white (*azucena blanca*) and yellow (*azucena amarilla*) lilies of the genera *Lilium* and *Hemerocallis*; and red, salmon, and red and white striped amaryllises of the genus *Hippeastrum* which go by such names as *pabellón* (from color resemblance to the Mexican flag), *azucena*

de Panamá or *josefina* (salmon-colored), *azucena roja*, and *azucena amarilis*. On occasion the related tuberose (*Polianthes tuberosa* L.) will be termed *azucena*, but the more common names are *nardo* and *flor de novia*.

Ruda, the medicinal rue mentioned previously.

Clavel and clave (*Dianthus caryophyllus* L.), the carnation pink or clove pink of our gardens, and *clavelina* (*Dianthus barbatus* L.) which is our sweet-william, are very popular cut flowers. Carnations predominate.

Primavera (*Primula* spp.). The primrose is represented by at least two species.

Belén, belem, or balsámico (*Impatiens balsamina* L.). The garden balsam which riots in a variety of colors.

India, coyol, platanillo, bástago azalea, canna (*Canna indica* L.). The canna or indian shot is cultivated in the yellow and red forms.

Betulia, vetulia, betunia, petunia (*Petunia nyctaginiflora* Juss., and other species). White, red, violet, purple and almost black forms are present.

Alcatraz (*Zantedeschia aethiopica* Spreng.). The calla "lily."

Hortensia (*Hydrangea opuloides* Koch.). Hydrangea.

Azalea (*Rhododendron indicum* (L.) Sweet, and other species). Strains with pink, purple, and white flowers are most common.

Palmas (Palmae). A number of species of small potted palms are present including *cola de pescado* (*Chamaedorea* spp.), *kentia* (*Howea* sp.), and several others. Also, several date palms (*Phoenix dactylifera* L.) are cultivated as ornamentals. The term *palma* is often applied to the native yucca (lily family) which is a very common ornamental.

A very important group of ornamentals is provided by the Crassulaceae or orpine family, especially in the genera *Echeverria* or *Cotyledon*, *Sedum*, and *Bryophyllum*; both introduced species and native wild plants. The more common cultivated forms include *siempre viva* (a general and a specific name), *rococó*, *concha* and *conchita*, *rueda de la fortuna*, *chisme*, *admirable*, *bruja*, *oreja de burro* and *oreja de ratón*, *roció*, *roña*, *dedo de la virgen*, and *amor tras de la puerta*. These vary in size from delicate *chismes* and *rococós*, through the *conchas* and *ruedas de la fortuna* (hen-and-chickens), to tall *orejas de burro* with attractive flowers.

Crespón (*Asparagus* sp.). A large climber. This term is also applied to the crape-myrtle (*Lagerstroemia indica* L.).

Perritos (*Antirrhinum majus* L.). Snapdragon.

Leocoyo (*Gladiolus* sp.). Gladiola.

Lirio and lirio-iris, flor de lis (*Iris germanica* L. and others) Blue to white irises.

The last group important enough to discuss here comprises the *cactos de maceta* or potted Cactaceae. In addition to large ornamental and economic cacti, there are several small ornamentals among which three are outstanding: (a) the *floricuerno* or *flor de cuerno* (named because often it is grown in a suspended horn) which is *Aporocactus flagelliformis* Lem.; (b) the related form or species known as *junco*, *junquillo*, and *flor del látigo* (names also applied to the previous cactus); and a plant which may not be a cactus (fleshy succulent, rose-colored flowers, no spines), which is known as *palma de Santa Teresa*, *teresita*, and *flor de lis*.

ECONOMIC TREES AND SHRUBS

The principal tree and shrub crops in the Quiroga area are derived from introduced Old World plants, as is true for most of the New World. Evidently the American Indian was able to fill most of his needs by gathering from wild plants. In Michoacán only a few of such plants are definitely known to have been cultivated prehistorically, and most of these were supplemented by collecting from their wild relatives. The most important of the native plants are as follows:

Maguey or *acamba* (*Agave* spp.), which is cultivated in several species, although wild agaves are utilized a little. Formerly the raising of agaves was highly important for the juice or aguamiel (*urani* and *ateri* in Tarascan) which was converted into a fermented drink or *pulque* (this Mexican word has replaced the Tarascan *ateri*), and also for the roasted heart or cabbage and stalk, as well as for fiber from the leaves. At present the 500 or more cultivated agaves function principally as fence or boundary elements and as ornamentals; and only a minor number are tapped for the *aguamiel* from December to May (chiefly February to April). A method of tapping is used in Quiroga which we have not seen elsewhere. Instead of cutting off the flower stalk before it begins to flower and excavating a cavity at the base into which the *aguamiel* can flow, several of the *pulqueros* in Quiroga cut out a few leaves or *pencas* and excavate laterally at the base of the untouched stalk. The *pulque* of Quiroga (made chiefly by inhabitants of El Calvario) is of a very fine quality, superior to anything produced in the main *pulque* area near Mexico City, but there is not enough to meet the local demand. In 1945 there were but five families (four in El Calvario) which produced *pulque*. The man of the house is the *pulquero* who cuts into the heart or *corazón* of the *maguey* with a *capador*, scoops out the pulp and shapes the cavity with a spoonlike *raspador*, and then collects the *aguamiel* three times a day (morning, noon, and late afternoon). One man looks after from four to six *magueyes* during a season, which commonly lasts for only 3 months. Some of the agaves are tapped in the sixth year, although many are not ready until between the eighth and eleventh years of growth. One *maguey* plant has a nominal value of \$3. A tapped *maguey* will yield from 2 to 6 liters of *aguamiel* a day, averaging between 3 and 4 liters. The woman of the house is the *pulquera* who elaborates and sells the *pulque*. A large pot or *olla* is washed, dried in the sun, then sterilized by bathing with alcohol which is set on fire. Mother of *pulque* (*pie de pulque*) is placed in the *olla*, *aguamiel* is poured in, and the pot is set out in the sun to ferment. Occasionally strengthening or flavoring is added in the form of alcohol, orange, banana, or pineapple. The *pulque* is sold in different strengths from fresh *aguamiel* or *aguamiel* which has just begun to ferment (*pulque dulce*) to a potent *pulque* which has fermented for a number of hours (*pulque fuerte*). The

aguamiel and the different *pulques* are sold for 20 to 25¢ a liter or 5¢ a glass. During the season *pulque* can be purchased in one grocery store, at the Sunday market, and in the homes of the *pulqueras*. Probably the total production of *aguamiel* and *pulque* does not exceed 10,000 to 12,000 liters a year, which may be worth \$3,000 retail. The *pulqueros* and *pulqueras* consider the making of *pulque* a sideline, and they are primarily *batea* workers. In the nineteenth century the municipality of Quiroga produced the distilled *vino de mescal*, but apparently almost the entire production came from areas outside of the present municipal boundaries. There is some roasting of cabbages and stalks, but this is mainly from wild agaves in the Malpais de Icuácató; and the chief source of *mescal* (the proper Mexican term for the roasted product which is consumed as one would eat a fibrous baked sweet potato) is the adjacent communities. January to May is the chief roasting season. Very little fiber (*ixtle* or *nequén*) is now made locally. In summary, the agave in the Quiroga area can be thought of as a remnant from the prehistoric and colonial days when it was of major importance.

Cacti are not important in Quiroga as fence elements, but some 300 plants are cultivated for their fruits and stems. The bulk of the cultivated cacti belong to the genus *Opuntia* and are prized for their fruits: (a) *Opuntia ficus-indica* (L.) Mill., *tuna mansa*, *tuna blanca*, *nopal manso*, *nopal de castilla*, *tenochtili*, *paré*; (b) *Opuntia robusta* Wendl., *tuna camuesa*; (c) *Opuntia megacantha* Salm-Dyck, *nopal de castilla*; (d) *Opuntia streptacantha* Lem., *tuna cardona*, *nopal cardón*; (e) *Opuntia hyptiacantha* Weber, *tuna chaveña*. The term *tuna* is used for sweet cactus fruit (from cultivated plants), and *joconostle* is applied to the sour or acid fruit from wild cacti. *Tunas mansas* are gathered from June to September. The tender flat stems sometimes are sliced and cooked as pot vegetables. In the sixteenth century, and possibly later, cochineal or *grana* was produced in the Pátzcuaro Basin; but there is no present production of *grana* although we noticed a few *Nopalea cochinellifera* (L.) Salm-Dyck southeast of Quiroga town. Minor in numbers but the queen of all fruit-producing cacti is the *pitahaya* or *tuna tasajo* which is *Hylocereus undatus* (Haw.) Britt. and Rose. This red-fruited cactus is frequently seen growing on rock and adobe walls and in trees. The fruit is most common from October to December.

Tejocote or *karás* (*Crataegus mexicana* Moc. and Sessé) the Mexican hawthorn, is cultivated a little (perhaps 200 trees, chiefly in the highland ranchos), but most of the fruit and all of the wood is obtained from the wild trees. The fruit, which is collected from September to February, is eaten fresh and also is converted into jam and jelly. There is some use of the *tejocote* as stock upon which are grafted quince, pear, and apple. Also, the young *tejocotes* constitute the favorite browse of the goats in the highlands.

Zapote blanco or *uriata* and *uruata* (*Casimiroa edulis* Llave & Lex.), despite its name does not belong to the Sapotaceae but belongs to the rue family. The term *zapote* comes from *zapotl* which the Mexicanos used for

sweet fruits as opposed to *jocoll* for acidulous fruits. This tree has a white flower and yellowish fruit which is harvested from April to August. Apparently this is a very old cultivated fruit tree since we saw no wild forms in the area. However there are fewer than 150 trees in the entire Quiroga area, usually occurring 1 or 2 in a *solar*.

Capulín or *xengua* (*Prunus capuli* Cav.), the native Mexican cherry or *cerezo*, is cultivated to the extent of 120 to 130 trees, but a large crop of fruit is obtained from wild trees in the highlands during June, July, and August when the *capulín* is the chief fruit consumed. The abundance of this tree in the area is indicated by the fact that the aboriginal name for neighboring Capula was Xenguaro (the two forms meaning place of the *capulín* in Mexicano and in Tarascan). The black *capulín* predominates over the white.

Aguacate or *cupanda* (*Persea americana* Mill. and *Persea americana* var. *drymifolia* (Schlecht. & Cham.) Blake), known in the United States as avocado and alligator-pear. About 110 *aguacates* are raised in the lowlands, which do not begin to supply the local demand. The season is April to September.

Guayabo or *enandi* (*Psidium guajava* L.). There are 73 guava trees in Quiroga, 37 of which are in the largest orchard in town. The principal season is December and January.

Chirimoyo or *ahte* and *uruata* (*Annona cherimola* Mill.). The fruit of this and closely related species is considered a delicacy, and is known under the names *chirimoya* and *anona*. There are but 63 trees, in the lowlands of Quiroga. The season is December to April.

There are few other native fruit trees worth mentioning. Some use is made of wild grapes, blackberries, and strawberries, but none of these is cultivated. The fruit of the few cultivated elderberry trees is consumed by the birds, and the same is true for the native mulberries. There are no mameys, *Spondias*, sapodillas, yellow sapotes, papayas, pineapples, and similar native fruits which require a warmer climate. A few hackberries, mesquites, and other trees of the steppelands occur, but they are ornamental curiosities.

In Quiroga and its ranchos there are 3,063 fruit trees of Old World origin, not counting the bananas, date palms, and 17 coffee trees, which are principally for ornament. Most of these trees are scattered by 1's, 2's, and 3's over the *solares*, with the exception of one orchard in a *manzana* near the springs of Atzitzindaro which contains 417 peach trees, 47 apricots, 42 quinces, 46 pears, all 30 grapevines, and 72 other trees and shrubs. The principal fruit trees are: 1,987 peaches, 365 citrus fruits, 160 figs, 120 apricots, 81 loquats, 69 quinces, 66 pears, 56 apples, 31 pomegranates, 30 grapevines, 22 mulberries, 21 plums, 9 walnuts,

and 6 cherries. Perhaps a third of the above trees are too young or too old or too degenerate to bear, and most of them are poorly attended excepting in 5 or 6 "orchards." Consequently fruit of all types is at a premium, and most of the fruit consumed in Quiroga is imported. There is such fruit hunger in Quiroga that much of the local fruit is consumed in a somewhat unripe condition.

The 1,987 peaches (*duraznos*, *melocotones*, *pérsicos*, *albérchigos*) are more widely distributed than any other fruit, being cultivated in 412 of the 797 occupied *solares*. Differences in cultivated strains and in the climatic conditions from the highland ranchos to the lowlands provide a season from June to September, although the main crop is picked in July and August. There are a number of strains which include white, yellow, and greenish-skinned peaches. We were unable to determine the relative proportions of clingstones to freestones. For the most part the local peaches are small, poorly flavored, and lacking in succulence. The peach (*Prunus persica* (L.) Batsch.) was one of the earliest and most widely distributed of Old World fruits in the temperate areas of the Spanish New World.

The 365 citrus trees or shrubs represent seven definite species, in addition to which there were three fruits (*naranja-lima* or *lima-naranja*, *limón pilato* and *limón romano*) with sweetish pulp of whose scientific identification we were uncertain. In Mexico there is a great variety of citrus species which were introduced very early (especially oranges and limes, which grow wild in parts of Mexico including southern Michoacán); and apparently a considerable number of hybrids and mutants exist. As a consequence of the many varieties and species, the terminology for the citrus fruits is in a state of anarchy; e. g., a lemon may be called a lime and a lime may be called a *limón*. Furthermore, the gradations in size and sweetness give rise to such terms as "lime-lemon," "orange-lime" or "lime-orange," "sweet lemon" and "sour lemon," "sweet lime" and "sour lime," and "sour-sweet lime." This situation, however, is a carry-over from the Old World where citrons, lemons, and limes so intergrade that at one time all three fruits (and their scores of varieties) were placed in one species. The approximate distribution of the trees by species was:

Limes, 165 trees known as *lima*, *lima agria*, *lima dulce*, *limón dulce*, *lima chica*, *lima chichona*, and *lima agridulce*

(*Citrus aurantifolia* (Christm.) Swingle). Actually, in Spanish usage, the trees are referred to in the masculine gender (ending in -o or -ero; *limero* in the case of the lime), and the fruit is placed in the feminine gender; e. g., *naranjo* is orange tree and *naranja* is orange fruit. The juice of limes and lemons is much used to flavor soups as well as in drinks.

Oranges, 104 trees of *naranjos* the majority of which are sweet oranges (*Citrus sinensis* Osbeck). Probably there are not more than six or eight sour oranges or *naranjos agrios* (sometimes incorrectly called *naranjo lima* and *limón pilato*) which belong to the species *Citrus aurantium* L. The sweet orange is the leading citrus fruit consumed in Quiroga, but most of the fruit is brought in from as far away as Nuevo León. The main season for gathering is November to January.

Lemons, 68 trees of *limones*, *limones agrios*, etc. (*Citrus limonia* Osbeck).

Citrons, 11 trees of *cidras*, *limones reales*, *cedros limones*, etc. (*Citrus medica* L.). Also, there are 6 *naranjos limas*, 6 *limones pilatos*, and 1 *limón romano*, which are variants or hybrids of some of the above species; and 3 *toronjas* or shaddocks (*Citrus grandis* Osbeck), and one *mandarino* (*Citrus nobilis* Lour.) The *naranjo lima* and *limón dulce* are sometimes placed in the species *Citrus lumia* Risso.

The remainder of the introduced fruits are very poorly represented and are not important, either in the economy or in the diet of the people, with the partial exception of the fig. These other fruits include:

Fig, the tree of which is *higuera* and the fruit *higo* (*Ficus carica* L.). These are principally black figs which ripen from June to November, and chiefly in August and September. There are 160 trees.

Apricot, *chabacano*, *albaricoque*, or *damasco* (*Prunus armeniaca* L.). There are 120 apricot trees. The crop matures from April to July.

Loquat, known in Michoacán as *níspero* (*Eriobotrya japonica* (Thunb.) Lindl.). The term *níspero* is applied to the medlar in some areas, and is also used for some native tropical fruits. There are only 81 trees to provide this prized fruit in November, December, and January.

Quince, *membrillo* (*Cydonia oblonga* Mill.). The fruit of the 69 quince trees is sometimes eaten raw, stewed, or converted into a liqueur, but most of it is made into a packaged preserve known as *cajeta de membrillo* or *ate de membrillo*. Most of the Michoacán *ates* are made in Morelia from fruits purchased in northern Michoacán. One of the leading *ate* manufacturers of Morelia is married to a native of Quiroga and owns the site of a former rum factory where there is a scattering of fruit trees. Quinces are gathered July to October.

Pear, the tree of which is a *pera* and the fruit a *pera* (*Pyrus communis* L.). The bergamot pear predominates among the 66 trees. July to September is the harvest period.

Apple, the tree is *manzano* and the fruit is *manzana* (*Pyrus Malus* L.). In Mexico a distinction is made between

apples for eating raw (the finest large red apples are often called *manzanas de California*, because so many are imported from western United States) and a rather poor kitchen or cooking variety known as *perón*. In Quiroga there were 29 *manzano* trees (including a few *de California*), and 27 *perones*. Apples are gathered July to December.

Pomegranate, *granado* or *granado cordelino* (*Punica granatum* L.). The fruits of the 31 pomegranates mature June to September. This fruit, *granada*, is not to be confused with the *granada de china* or *granadilla* (of which there are three vines in Quiroga) which is a *Passiflora* native to South America despite one of its names.

The restricted number of cultivated grapes, mulberries, plums, walnuts, cherries, olives, etc., does not justify a discussion of them. It is notorious that the Spaniards throughout the colonial period attempted by laws and other means to prohibit or discourage the planting of plants that would compete with peninsular interests, especially grapes and olives. The paucity of bananas, date palms, and coffee trees is due to unfavorable climatic conditions, and the climate also explains the absence of the popular Old World mango. There are four clumps of sugarcane, which are not doing well.

ANIMAL HUSBANDRY

Although the Tarascans had a number of domesticated and semidomesticated animals (principally the dog and the turkey) animal husbandry in Michoacán cannot be said to have begun before the introduction of browsing pack and draft animals. Horses, European dogs, and pigs came with the first Spaniards in 1522. By 1530 horses, cattle, sheep, pigs, and chickens were being raised in the Pátzcuaro Basin and the lands north to Huaniqueo. Throughout the early colonial period the raising of horses and cattle remained in the hands of the whites because (1) both were costly to acquire, (2) cattle required considerable pasture and water and also were injurious to the crops planted by the Indians, and (3) an Indian might not own or ride a horse without special permission from the Government. The Indians took somewhat to the raising of sheep, and more so to pigs; but it was the chicken which became the most common and important introduced animal among the Indians. In part this was because they were already accustomed to poultry raising from their possession of turkeys, but probably a more important factor was the

series of laws and regulations issued by the vice-regal government requiring each tributary Indian to raise a certain number of chickens each year. At one time the requirement was that every tributary Indian should raise at least 12 chickens (*gallinas de Castilla*) and 1 turkey gobbler and 6 turkey hens (*gallinas de la tierra*). Although the donkey or burro and the goat are not mentioned for the Pátzcuaro area in the first few years after the Conquest, they were undoubtedly there many years before 1560. The goat never became popular in the area, but the burro soon became the work companion of the Indian. It is claimed that the first burros were brought to Mexico in 1531, primarily so that mules could be bred. The Old World mulberry and the Asiatic silkworm were brought into the basin before the 1570's, and there is some indication that it might have been as early as the 1530's. However, the silk industry never prospered in the Pátzcuaro Basin. Among the Old World animals that entered the area without benefit of historical record were cats, European bees, European rabbits, and a few ducks, geese, and peafowl. Of these only the first two attained any local importance.

ANIMALS OF THE INDIANS

Archeology, the *Relación de Michoacán*, and various reports of the sixteenth century, provide some information concerning the animals, domesticated, tamed, or captured by the Tarascans. Definite domesticates were the dog and the turkey; and possibly a duck was domesticated. The cochineal bug and a honeybee were semidomesticates; and it is likely that the "hump-backed dog of Michoacán" reported in the 1570's by Hernández was the *coati* which is a common pet in the warmer portions of Michoacán. A number of carnivores were kept in a "zoo" in Tzintzun-tzan, and many birds with colorful plumage were kept on hand to provide the feathers used in the beautiful Tarascan featherwork which is now a decadent and practically extinct art. Although snakes played an important part in the mythology and the ceremonial life of the Tarascans, there is no evidence that any were kept as "mousers" as is still done in some parts of Mexico. Actually the only truly domesticated animals the Tarascans had were the dog and the turkey.

MODERN DOMESTICATED ANIMALS

The modern Quiroga farmer is essentially a crop farmer, as were his Indian ancestors. However, he has taken over the Old World ox, burro, and horse to help him with his work; beef and pork have supplanted the food obtained by hunting deer, rabbits, and peccaries; and chickens have nearly displaced the domesticated turkey and the wild quail, pigeons, ducks, and chachalacas as providers of flesh and eggs. In addition, wool from sheep provides a supplement to the native cotton from the *tierra caliente*, and cats afford a certain amount of protection from rodents. However, it is doubtful that the prehistoric Tarascan farmer suffered much loss of maize through rodents, once the maize was placed in the granary, since the most harmful rodents are the rats and mice which came over with the Spaniards.

In order to obtain some idea concerning the animal economy of Quiroga we questioned every one of the 797 households as to what domesticated, tamed, and caged animals they possessed. We were greeted with some amusement, when after jotting down the understatements on oxen, chickens, burros, and other economic animals, we asked for the number of dogs, cats, tamed pets, caged birds, and any and all other animals that belonged to the household. However, these last items are the only ones for which we feel that we have accurate statistics. The degree of accuracy for the other animals varies considerably. The numbers we obtained (by questioning, supplemented by observation) for such animals as pigs, chickens, and beehives are not far wrong since these animals commonly were present and within our view. On the other hand, animals which usually were at work or at pasture (oxen, sheep, goats, burros, and horses) we were not able to check carefully, and the figures we present may be as much as 50 percent too low in some cases—especially for oxen and horses. In table 28 are listed the animals by common names (with no consideration for age, sex, or other condition), with the absolute number of each and the number of households which owned them. Comparative figures are given from the 1900 and 1930 censuses of the greater municipality.

TABLE 28.—Comparison of animals owned in the municipio in 1945, 1930, and 1900

Animal	1945		Number of head in municipio in—	
	Number of head	Number of households	1930	1900
Chickens.....	4,299	510	5,099	-----
Cattle.....	729	132	3,781	1,965
Dogs.....	569	369	-----	-----
Pigs.....	483	209	1,106	1,144
Sheep.....	453	38	395	750
Beehives.....	451	70	1,405	-----
Cats.....	401	301	-----	-----
Burros.....	203	118	1,130	278
Turkeys.....	193	68	310	-----
Horses.....	122	80	547	663
Caged birds.....	76	59	-----	-----
Goldfish.....	60	1	-----	-----
Pigeons.....	59	26	-----	-----
Goats.....	47	9	167	197
Rabbits.....	5	4	-----	-----
Mules.....	3	3	83	256
Deer.....	2	1	-----	-----

CATTLE

The term "cattle" is understood in the United States to refer to taurine animals, but the Spanish equivalent "ganado" refers to a number of domesticated quadrupeds. The larger domesticated mammals are called *ganado mayor* collectively, and this term embraces oxen (*ganado vacuno*), horses (*ganado caballar*), mules (*ganado mular*), and sometimes burros (*ganado asnal*). The term *ganado menor* applies specifically to sheep (*ganado lanar*), but is also used to embrace goats (*ganado caprino*) and pigs (*ganado porcino*). The popular comprehensive term equivalent to our "cattle" or oxen in the broad sense is *res*; e. g., *once reses* means "eleven head of cattle." In order to get complete information we had to inquire after each animal by sex, age, and condition. That is, if we asked after bulls (*toros*) we would not be given the number of work oxen or bullocks (*bueyes*) but merely the adult males used for breeding purposes, even though some of the work oxen are not castrated males or steers. The situation was worse with poultry where we could not ask for chickens (*gallinas*) which would elicitate only the number of hens, but had to ask specifically after pullets (*pollas*), roosters (*gallos*), and young chickens (*pollitos*).

The ox (*Bos taurus*) is easily the most important domesticated animal in the Quiroga area, or at least it was in 1945 and 1946. We have not been able to discover the amount of damage done by the foot-and-mouth epidemic (*aftosa*) which swept

over Michoacán after we left. Possibly not many of the cattle were killed by Government agents, since Michoacán was the seat of armed resistance to this part of the program for control of the epidemic. Oxen provide most of the work performed by animals, since they do all of the plowing and pull most of the carts. The work of mules, horses, and burros in light cultivation, threshing, and packing probably does not amount to one-half of the work performed by oxen. Furthermore, beef is the principal meat consumed, and the *abasto* charges usually constitute the chief source of municipal income. In recent years between 250 and 350 *reses* have been slaughtered annually in the Quiroga *abasto*. Most of these animals have been aged and feeble bullocks and cows. Since we did not check the individual records to determine origin of the slaughtered animals, we are not certain what proportion came from parts of the municipality outside of our area of study. However, the majority were of Quiroga provenience. Dairy cows are lacking, since the main functions of cows is to bear males for work purposes. Most cows are milked, but the production is little—running from 4 to 8 liters a day in the optimum periods (the first few months after coming "fresh," and during the rainy season) to about a liter in the driest portion of the year (February to May) and nothing at all when the animal "drys up." The bulk of the milk is consumed in boiled form, alone or with coffee (*café con leche*—a common drink), and the cooked cream (*nata*) also is eaten. Very little cheese is made and all of this is of the crude white salted type in small cakes known as *queso ranchero*. No butter is made since butter is practically unknown in the dietary of the average family. Formerly there was a Plaza de Toros on the Calle de la Reforma, but this area is now occupied by a garden and orchard, and the *jaripeos* (a type of rural rodeo which includes a bloodless form of bull fighting) are now held in an inclosed area between the Calzada Ramón Corona and the Calle Negrete. The *jaripeo* constitutes a very minor form of utilization. In summary, the chief uses of oxen are for work, meat, milk, hides, and fertilizer. The fertilizer is obtained by pasturing the animals in the fields to be fertilized, and by collecting the manure in the corrals.

Three types of oxen are recognized: (a) the *criollo* which is the local dominant breed, (b) the *raza pura* or *finá* (thoroughbred) which may be an occasional imported Hereford or Shorthorn, and (c) the *cruzada* which is the local *criollo* stock improved by breeding with some animal of presumably pure blood. Practically all of the cattle are *criollos* of middle-size Iberian type, probably mixed with Roman draft blood, with long horns (not so long as those of the related Texas long-horn), and solid colors normally ranging from buff and dun to reddish and black. We saw no pure breeds but there was evidence in the *cruzadas* of Hereford, Shorthorn, and possibly some other admixtures. Few head of cattle are pastured on the "range" or common *montes y pastos*, and most of the animals are rounded up or brought in from work to corrals daily. About one-fourth of the *solares* in town and nearly all of the households in the ranchos possess corrals. Cattle pasture on the wild grasses (chiefly various species of *Andropogon*, *Panicum*, *Paspalum*, *Aristida*, *Muehlenbergia*, *Bouteloua*, *Bromus*, *Eragrostis*, *Pennisetum*, *Setaria*, *Festuca*, and related species) and maize stalks left standing in the fields, and are fed *rastrojo* in the corrals. In normal years there may be as much as a 20 percent loss (chiefly March to June) due mainly to lack of water, poor pastures, and several epizootics (especially anthrax and the related blackleg). Practically all oxen (as well as horses and mules) are branded. This is done in the first or second year after birth, and usually in October and November. Despite the laws on brands and registrations (see item 6 under Municipal Finances, p. 113) only 115 head of cattle were registered in the tax collector's office in 1945, and but 325 were registered in 1946. According to our census the distribution of oxen in 1945 was:

Bullocks or work oxen (<i>bu-eyes</i>).	381 in 119 households.
Cows (<i>vacas</i>)-----	189 in 108 households.
Bulls (<i>toros</i>)-----	10 in 7 households.
Calves, yearlings, young bulls, heifers (<i>becerros</i> , <i>terneros</i> , <i>novillos</i> , and the feminine forms).	149 in 84 households.
Total-----	729 in 132 households.

Although 11 cattlemen or *ganaderos* were reported in the census of 1940, these people called themselves merely *agricultores* in 1945. The largest number of cattle any one person claimed

to own was 20. Bullocks are commonly owned by two's, most of the owners having but one yoke and the largest number claimed being four yokes. Occasionally a farmer will have but one or three bullocks, which usually represents the recent death or slaughter of one. Nearly six-sevenths of the cattle are owned in the ranchos, including all 10 bulls. The Quiroga milk supply comes principally from the cows owned in town and in the neighboring ranchos of Atzimbo and Zirandangacho.

PACK ANIMALS

Horses, mules, and burros are used for packing, riding, and threshing, and very seldom for drawing carts or any other wheeled vehicle. The 122 horses (including mares and colts) are owned by 96 persons, chiefly in the ranchos. The largest number owned by one person was six. Horses are used principally for riding, threshing, and packing produce to town. The local horse (*Equus caballus*) is of medium size with a considerable variety in color and markings, and undoubtedly represents the local development of the peninsular arab. Mules (*mula* in the feminine and *macho* in the masculine) practically do not exist in Quiroga. Officially there is only one *mula*, that owned by the municipality. However we saw at least two others in the ranchos; they were being used in threshing wheat. Apparently mules were rather common in Quiroga until the coming of the railroads reduced the *arriero* profession and burros supplanted mules. Burros (*asno*, *jumento*, *burro* and the feminine equivalents) are the chief pack animals. In addition to bringing in the crops, they are used by the *carboneros*, *leñeros* and *bateleros* to bring charcoal, firewood, and *bateas* to town. In fact burros pack about everything that is to be transported locally excepting water in town (they are used to pack kegs of water in the dry season in the ranchos) and carcasses of slaughtered beeves which are carried from the *abasto* to the meat shops on the backs of horses. The local small and usually dun or mouse-colored burro (*Equus asinus*) is of the Andalusian strain which predominates in Mexico. The 203 burros are owned by 118 individuals. Farmers commonly own but 1 burro, and the score of *arrieros* own from 1 to 10 burros each. The *arriería* business was maintained on the basis of a much larger number of burros until the highway was completed 1937-38, after which most of the *arrieros*

abandoned the profession and turned their *bestias* loose in the fields where (according to local reports) large numbers died of hunger. (For details on the present status of *arriería* in Quiroga see the section on Transportation.)

GANADO MENOR

Sheep, although numbering 453 or more head, do not form an important part of Quiroga economy, since they belong to but 38 owners and are concentrated in the ranchos from Atzimbo to Icuácato. Most of the sheep belong to 6 men in Icuácato and La Tirimicua who run flocks of from 25 to 100 sheep. The local sheep (*Ovis aries*) appears to be of Merino type, producing a white short wool (there are some brown and black strains). Most of the wool is sold locally and woven into serapes. The sheep (*borregos* or *carneros*) usually are sheared in the early summer and the late fall. There is little consumption of mutton and lamb. Whenever a sheep is killed the skin is sold to one of the local tanners or to a weaver who uses the wool.

Goats (*chivos* or *cabras*) are few in number and are rather nondescript, and are not mohair, mutton, or milk type. Most of the goats are owned in Icuácato and are herded with the sheep. Nine people own the 47 listed goats, 21 of which belong to 1 family. There is a slight consumption of goat and kid, and a few goatskins are tanned each year in Quiroga. There is no production of goat milk and cheese in Quiroga town, but some milk and cheese is brought in occasionally from Icuácato. The dung from sheep and goat corrals is used as fertilizer.

Pigs, although classed as "small cattle," are commonly kept around the houses in the settlements and are never herded in the acorn-rich woods of mixed oaks, madroños, and pines. The pig in Quiroga is an exceedingly useful animal. He is the number one scavenger and "garbage-collector" (aided by dogs, chickens, and vultures), and is especially useful in cleaning up the human ordure on abandoned *solares* and throughout the outskirts of the settlements. Between such gleanings and any refuse from the kitchen, supplemented by a little maize, raising 1 or 2 pigs is not expensive. When ready for slaughter the pig (*cerdo*, *puerco*, *cochino*, *marrano*, *xanu*, *coyame*, "cuck") is taken to the *abasto* by the owner or purchaser. Oxen and pigs are the only animals

commonly slaughtered in the *abasto*, and the number of pigs slaughtered annually runs between 350 and 450. Pork meat ranks second in consumption. Boiled pork, cracklings, lard, and sausages are the principal forms of consumption, and ham and bacon are practically unknown. Lard is the chief cooking fat here, as it is over most of Mexico. Although a few pigskins are tanned, the skin is commonly cooked with the attached pork, and it is not uncommon to find in a serving of *pozole* (pork, hominy, and flavorings) a sector of skin adorned with a scattering of bristles. Local pigs (*Sus scrofa*) are predominantly of the old red Spanish breed which tend to run small, "razor-backed," and with comparatively few bristles. There is said to be a second breed, and several pigs of improved strains (*puercos finos*), which probably accounts for the occasional lard hog (castrated) and pigs of varied coloration among which is a dark-colored or blackish pig which may represent the Neapolitan strain. There are 483 pigs in 209 households. Usually there will be but 1 or 2 pigs in a household, but a few families own up to 16 pigs.

POULTRY

Chickens are the most widely disseminated of the domesticated animals, there being 4,299 in 510 of the 797 households in the area. The modal distribution is 3 hens and a rooster, but there are flocks of 37, 45, 46, and 60 fowls. Of the total number of chickens 3,881 were hens, pullets, and young chickens distributed among 499 households, and there were 418 roosters in 341 households. Those families which owned only roosters commonly had fighting cocks (*gallos de pelea*). One man owned 10 of these fine but noisy birds. Until about 1942 there was an ornate Plaza de Gallos on the Calle Guerrero, but it has been torn down. At present cock fighting is carried on in temporary arenas. By day the chickens range over the *solares* and up and down the streets, and at night they commonly roost on bushes, trees, and outhouses. Weasels, squirrels, skunks, foxes, coyotes and cacomixtles cause most of the losses of birds and eggs. Excess roosters and old hens are commonly sold to the restaurants, *fonderas* (women who sell food in the plazas and in *puestos* on the principal street corners), and wealthier people of the community. When the old bird has been cooked it ceases to be *gallina* or *gallo* and

becomes *pollo*. The eggs are commonly brought into the grocery stores (one or two or three at a time) and exchanged for so many centavos worth of lard, sugar, coffee, salt or whatever else may be needed at the moment. Although the local chicken (*gallina corriente*) is presumably derived from the so-called Spanish or Mediterranean breeds of *Gallus domesticus* (Andalusians, Minorcas, Leghorns, etc.), there is evident a considerable admixture of Indian Game, Rhode Island Red, Plymouth Rock, and possibly Wyandotte and Orpington blood. There is scarcely any creature more pitiful or more ridiculous than a poor half-plucked, lice-ridden, scabby chicken, which in its body and plumage unsuccessfully tries to combine three or four of the above strains.

In the turkey (*Meleagris gallopavo gallopavo*) we have an animal which may well have been domesticated in the Tarascan region. Some biologists (such as Nelson) believe that the Tarascan highlands are as logical a site for this domestication as any. Wild turkeys were present in the area until recently, but now the nearest wild flocks are some 50 miles to the southwest. The turkey, which is known locally as *guajolote* (from *huexolotl* the Mexican name for the turkey cock), *cúcuno* or *cócono*, *pípilo* (Mexicano, from *pilpiltotol* "bird of the rich"), and *curucu* or *coruco* (Tarascan), has lost much of its pre-Spanish importance and there are only 193 turkey hens and gobblers in 68 households, chiefly in the ranchos. The largest number in any flock was 13. Few turkeys are kept in town because they are apt to sicken and die unless they have plenty of space. Dark-colored or black turkeys predominate, followed in numbers by white turkeys, white and black turkeys, and a few brown turkeys. In early Tarascan times the white turkey cock was venerated (under the name *tarechu*, which is now applied to the rooster) as a representation of the god Curicaueri. According to the *Relación de Michoacán* the Tarascans did not eat turkeys (at least they did not eat the turkey hens) which were fed to the animals in the royal or priestly "zoo" and were sacrificed to the gods. The feathers were used also as offerings and for ornamentation of the representations of deity. A number of terra-cotta representations of turkeys have been recovered from ruins in Michoacán, Colima, and Nayarit. Despite the important ceremonial position of the turkey, it is difficult for us to believe

that turkeys were not eaten by the ancient Tarascans, especially in view of the fact that many of the neighboring peoples ate the bird. More than enough birds for sacrifice and for plumage must have been raised, since there are several mentions of pueblos paying a tribute of "domesticated turkeys" to the Tarascan ruler. It is possible that only the priests ate turkeys, since they were allowed to embellish themselves with turkey feathers. However, if the turkey were an avatar of a god, and something of a totemic representation, it is possible that the Tarascans would not eat the bird, while those peoples who had not domesticated the bird and for whom it had little or no religious significance would have no such scruples. At any rate, the turkey is now a highly prized item of food.

BEES

Beekeeping (*Melipona* spp.) for honey and wax was quite important among the ancient Tarascans, and it is still of importance, but apparently only Old World bees (*Apis mellifera*) are kept in hives. There are 451 beehives (*colmenas* or *cájonas de abejas*), which belong to 70 households. Most of these (310) are kept in the ranchos as one would expect from the better pastures available in those areas. The distribution ranged from only 1 and 2 hives up to 14, 15, 16, 17, and 30 in a *solar*. The honey and wax commonly are taken in the fall. The honey is consumed by the family and sold to merchants in Quiroga and the beeswax is sold to the candlemakers in town. As is true of all Catholic communities in Mexico, there is an enormous consumption of candles in churches and in the homes (before household shrines and for illumination). The beehives are home-made wooden boxes commonly with a covering or roof of tiles. Due to the variety of flowering plants the honey varies considerably in flavor, although a flavor possibly derived from *salvias* predominates. Occasionally poisonous honeys are developed, probably from the nectar of a number of poisonous *solanums*, *spurges*, and *asclepiases*.

PETS AND OTHER HOUSE ANIMALS

Dogs outrank cats considerably in numbers (569 dogs to 401 cats) and slightly in popularity (369 households have dogs and 301 possess cats). Dogs are more useful, since they will guard houses, run down game, and can be used to help

herd animals, especially sheep. Dogs are proportionately more numerous in the ranchos than in town. Families may have up to six, seven, and eight dogs, but the usual number is one. Despite the great variation to be found in the dogs they all appear to be of Old World stock (*Canis familiaris*). Undoubtedly there has been absorbed into the make-up of the Quiroga dogs the various Indian strains (hairless dogs; fat little red dogs which were castrated, fattened, and eaten; etc.) in addition to the strains brought over by the Spaniards (sheep-dogs, greyhounds, bloodhounds, terriers, etc.). We saw only two or three which approximated the Mexican hairless dog (which is almost extinct), and none at all of the eating type. There were a few dogs of pure type brought in from outside of the area, including fox terriers and greyhounds. After a considerable sojourn and much wandering over the area, we are not inclined to rate the dogs of Quiroga very highly in honesty, frankness, and courage. A particularly vicious trait is the habit of many to approach silently from behind and bite without warning.

Cats (*Felis domestica*) were introduced by the Spaniards. They serve chiefly as lap pets and mousers. Tortoise-shell and tabby cats predominate, and there are but few black or white cats. A few families have angoras. Some families have up to five and six cats, but there usually is but one.

The only other mammals kept were two tame deer (*Odocoileus mexicanus*), three Old World rabbits or *conejos de castilla* (*Lepus cuniculus*), and two tamed local rabbits or *conejos de campo*, (*Sylvilagus floridanus*). Not caged but claimed by 16 households were 59 pigeons (*palomos*, *pichones*) which seemed to be the European *Columba livia*. No apparent use was made of these birds, but they were fed occasionally. There were also four caged native mourning doves known as *huilota* and *torcaz* (*Zenaidura macroura marginella*). Besides these *huilotas* there were 72 caged birds in 55 homes. From the evidence of empty cages there were formerly many more caged birds, and we were informed that this was true up to the last revolution. Unlike in many parts of Mexico the favorite bird was not the mockingbird or *zenzontle* (*Mimus polyglottos leucopterus*), of which there were but four. The favored singers were 16 *jilgueros* (*Myadestes obscurus*) and four *clarines* (*Myadestes unicolor*). These two solitaires are caught in the wooded

highlands near Quiroga, where often their rippling notes can be heard in the wooded canyons although the birds are seldom seen. The next group comprised 19 *gorriones*, including three *gorriones amarillos*. The term *gorrión* is applied to a number of the Fringillidae including grosbeaks, finches, and sparrows. Among the *gorriones* we saw there was a predominance of Mexican house finches (*Carpodacus mexicanus*) which are among the most common wild birds in the settlements. There were 15 Old World canary birds, principally of the greenish-yellow type. The last group of caged birds consisted of 14 parrots and macaws, most of which were not kept in cages but were chained to perches; and a few were so tame that they were allowed to roam throughout the patio and house. The local wild thick-billed parrot is not among these birds, and all of the four forms represented are brought up from the *tierra caliente*. There was one *guacamayo* or macaw (*Ara militaris*); five *cotorras*, *cotorritas*, or *periquitos* (*Aratinga canicularis*); and seven *loros*, *pericos*, or *cotorras* (*Amazona* spp.). One house had 60 goldfish (*pescados de colores*) in a tank in the patio.

GATHERING ECONOMY

We use the phrase "gathering economy" to embrace all the pursuits which are based on gathering or collecting wild plants and animals. One of the oldest, and the most important of these pursuits, is the gathering of deadwood and the cutting of trees for firewood and charcoal. Sun worship (associated with fire) was the basic element in the Tarascan religion, and the favored rite and sacrifice was the burning of wood in the temples. Although the introduction of Christianity put a stop to votive fires, wood cutting for domestic firewood and charcoal (the use of charcoal apparently was introduced by the Spaniards) continued at a rate perhaps accelerated by the introduction of steel hatchets and axes. As mentioned elsewhere, wood is the chief domestic fuel for cooking and heating, and is used on occasion as the sole source of illumination. In 1940 there were but two wood cutters (*leñero*, *leñador*) listed in the census, but in 1945 there were 12 whose principal occupation was the cutting, packing to town, and distributing of *leña* or firewood. Actually, the number is greater since many of the *batelleros*, *campesinos*, and *jornaleros*, whenever not otherwise engaged, earn a living by cutting firewood. Shrubs may

be cut and any deadwood may be cut or gathered, but theoretically by law permission must be obtained before cutting a live tree. Very little attention is paid locally to the forest laws of the State and the Nation. Most of the firewood is pine (*ocote, pino*), oak (*encino, roble*), and madroño. The wood is cut (and split if necessary) into pieces 2 Spanish feet in length and varying from about 5 to 10 cm. in diameter. A *carga* or burroload consists of 40 *pares* or 80 sticks. The wood is sold in Quiroga at \$1 a *carga* for oak and madroño wood and 80¢ to 85¢ a *carga* for pine. Most of the firewood is produced locally, but a little pine-wood is brought in by truck from the Pátzcuaro area. The wood is retailed at a slight profit in a number of private houses and in most of the small stores. The usual equipment of a *leñador* is an ax and a burro—his own or rented. It is impossible to compute daily earnings since this varies greatly according to the distance that must be covered to the nearest available tree, the size and species of the tree or shrub, and whether it is seasoned deadwood or green.

There were no charcoal burners or *carboneros* listed in 1940 and but three in 1945. Comparatively little charcoal is consumed in Quiroga, and much of the charcoal produced locally is taken to Morelia—by truck and by burro. What was said about wood cutters also applies to charcoal burners, and the number is considerably larger than that indicated by three full-time followers of this occupation. The equipment is the same as for wood cutting plus sacks in which to bring the charcoal to town. There are two formal charcoal stores or yards (*carbonerías* or *expedios de carbón*), and charcoal also is handled by a number of the grocery stores. Oak and madroño are the favored woods for charcoal burning.

There is very little cutting of trees for lumber. What is cut is chiefly to supply the rafters (*vigas*), planks (*tablas*), and shakes (*tejamaniles*) needed for some particular edifice. Since planks and shakes are little used in most buildings, the chief form of lumber is *vigas*. We saw no lumbering while we were in Quiroga. Much of the pine lumber utilized by the carpenters in Quiroga comes from the Pátzcuaro and Tacámbaro areas by truck. There are no professional timbermen in Quiroga.

WOOD FOR BATEAS

Of considerable importance, and once of very great importance, is the cutting of wood for *bateas* (painted trays). Formerly *bateas* were made of basswood or *cirimo* (*Tilia* spp.), of which there are three species in the area, but centuries of cutting this tree have nearly annihilated it, and now there are only a few individuals in some of the more remote canyons. During the nineteenth century, and possibly earlier, the *batelleros* (men who cut the trees and make the rough *bateas*) began to use pine instead of basswood, and now all *bateas* are made from pine wood. There are at least eight species of pine in the area, of which four are commonly cut for *bateas* (*Pinus michoacana* Martínez, *P. montezumae* Lamb., *P. leio-phylla* Schlecht. & Cham., and *P. pseudostrobus* Lindl.). The first two species are the most common and the largest of the pines in the Quiroga area. Cutting of pines for *bateas* and for other purposes has removed all pines from the immediate vicinity of Quiroga, and now the *batellero* must go several miles into the highland woods to find a suitable pine (large enough, and with a minimum of knots and pitch). If the *batellero* cuts a pine on Government property or on the *ejido*, he must obtain governmental permission and pay a tax. Should he cut on private property, where the best pines are at present, he must pay from \$5 to \$15 a tree. There is a considerable amount of illegal cutting, both on public and on private property. The typical *batellero* is equipped with an ax, two curved short-handled adzes (*azuelas*) made in Quiroga or Pátzcuaro, a plane or *cepillo*, and a *compás* (calipers). After locating a suitable tree and making arrangements for cutting it (with the owner or forestry agent) the *batellero* and possibly one or two companions equip themselves with food for 3 to 6 days and make camp at the tree. One man can cut an average tree in one day, using only an ax. From the appearance of the stumps in the area, all trees are "beavered," and we saw no evidence of the use of saws. The average tree (costing from \$10 to \$15) will yield 12 to 18 dozen *bateas* of the more common sizes, which range from about 25 to 45 cm. in diameter. Formerly *bateas* were made which were more than a meter in diameter, but now it is almost impossible to find a tree large

enough for such *bateas*. The various names, shapes, and sizes of *bateas* are discussed in the section on the preparation of the finished product. After the tree has been felled slabs or chunks (known as *tejas* and *penas*) large enough for the desired *bateas* are chopped and split off from the trunk. Due to lack of skill with an ax a considerable amount of wastewood is left between each slab. After all the slabs of economic sizes have been removed the badly mangled trunk commonly is left to rot. Between the chips from the elaboration of the *bateas* and the "skeleton," probably more than half of the tree goes to waste. The next step is to use the compass to mark the desired size on a slab and then with the ax bark the slab and round it roughly. The concavity of the *batea* or bowl is made with the adz, and the rim and exterior are smoothed with the carpenter's plane and occasionally with a file. The adz marks on the interior give a rippled effect which immediately distinguishes a Quiroga "lacquered" *batea* from one made in any other part of Mexico. *Batelleros* round off, adz out and smooth from 6 to 10 *bateas* of the larger sizes a day, and average about a dozen a day of the smaller sizes. This means that one man will spend from 2 weeks to a month on an average tree. Members of his family may replenish his supply of food, or he may go to his home whenever necessary. However, usually there are several *batelleros* working together on the same tree, since the slabs should be converted into rough *bateas* (*bateas crudas* or *bateas en blanco*) before they have had much chance to dry. Whenever a large tree is felled, each *penca* is worked into a rough *batea* before another *penca* is cut out. Although most of the *bateas* are brought down to Quiroga *en blanco*, tied on the back of a burro, some men pack the *penas* to their homes where they can work in greater comfort; and this also makes available the chips and shavings for fuel. The younger married men are more apt to do this than the older *batelleros*. A dozen of the smaller *bateas en blanco* bring from \$4.50 to \$6.50, and a dozen of the larger sizes sell for from \$7 to \$9. Quite often a member of the *batellero's* family applies the *maquea* or slip before the *bateas* are sold to a painter. Varying with the skill of the *batallero* and the quality of the tree, net income per day (after subtracting the cost of the tree and assuming that the *batellero* owns a pack ani-

mal) runs from \$1.50 to \$6.75, with the average being between \$3.50 and \$5. Practically all of the *batelleros* are descendants of Indians and live in the Calvario district. Consequently most of the *batelleros* are *ejidatarios* and divide their time between making *bateas* and farming their parcels. In 1940 there were 24 professional *batelleros* listed, and in 1945 there were 51 in 40 households. The presumptive increase is not real since many of the individuals listed in 1940 merely as *ejidatarios* or *campesinos* were *batelleros* at the same time. Although some of the landless *batelleros* make *bateas* the year around, there is general slackening from May into September during *las aguas* which is the most active farming season of the year, and again in November and December into the first part of January which is the period of harvesting maize and *habas* and in which there are a number of important festivals. Estimates of *batea* production are given with the discussion of the finished *bateas*.

There are few other utilizations of trees in the Quiroga area. Although three of the pine species are good sources of turpentine (*Pinus leiophylla*, *P. montezumae*, and *P. pseudostrobus*) we observed no turpentine gathering in 1945 and 1946. Some turpentine is collected occasionally, and we saw a number of abandoned turpentine "cups" (small terra-cotta pots which are affixed to the trunk below an incision) in the highland forests. A little resinous torchwood (*ocote*, *cueramu*) is cut, but there are so few good pitch pines (*Pinus teocote* Schlecht. & Cham.) in the area that most of the *ocote* is brought from the Pátzcuaro area. When *ocote* for kindling and illumination purposes is made locally, one of the more resinous pines is selected, a section of the trunk is barked and scarred, and the resin is allowed to concentrate. After a few days, a thin slab is cut out of the exposed section, and this is split into slivers. The fir (*Abies religiosa* (H. B. K.) Schlecht. & Cham.) is used slightly for lumber and oleoresin, and its branches are used to decorate churches and shrines on certain festivals. The alder (*Alnus oblongifolia* Torr.), known locally as *tepamu* and *aile*, is cut for firewood, and its branches are used for decoration and in the making of booths or *ramadas*. The 12 or more species of oaks (*Quercus* spp.) are the chief source of wood for plows and yokes and for handles of axes, mattocks, etc., as well as fence posts, gate bars or *trancas*, and the firewood and

charcoal mentioned previously. Gall-apples, which develop on oaks and madroños, are used a little in tanning and formerly were employed in making ink. Madroño (*Arbutus* spp.) of four species is used for some farm tools, and there is a growing use of *Arbutus xalapensis* H. B. K., known locally as *madroño* and *pananks*, in the bowls, vases, toys, and other items turned out in several Quiroga shops. The easily worked wood of *jaboncillo* or *shapu* (*Clethra mexicana* DC.) is also used somewhat in the wood-turning shops. There was reported, but we were not able to confirm, the carving of masks from the wood of the *colorín* or *purenchecua* (*Erythrina flabelliformis* Kearney), which is semicultivated as an ornamental in the lowland.

WILD FOOD PLANTS

Next in importance after wood is the collection of wild food plants. The most important of these are the fruits collected from the *tejocote* and *capulín*, which are cultivated also; and following these in value are the wild *magueyes* for roasting, and the fruits of the wild cacti. The green, white, and sometimes red-colored acid tunas (known as *jocostonles*) of *Opuntia fuliginosa* Griffiths, *Opuntia imbricata* (Haw.) DC. and other opuntias, gathered principally from July to December, are eaten raw, used for flavoring soups, and cooked in stews. However, the consumption of *jocostonles* is minor in Quiroga as compared with the drier regions to the north and east. Among other wild fruits are grapes, currants, gooseberries, blackberries, strawberries, and elderberries, but these fruits commonly are gathered incidentally by *batelleros*, *leñadores*, *carboneros* and others with business in the woods of the highlands, and by children in the ranchos. A considerable number of native wild and introduced escaped plants are collected for pot greens and vegetables. Under the terms *quelites* and *bledos* are collected not only amaranths and chenopods, but a number of plants which we were not able to identify. The introduced wild mustard and wild radish are often used for greens, as are native and introduced purslane and dandelion. Various members of the mint, parsley, laurel, and composite families are used in flavoring foods. On occasion wild beans (*Canavalia* and *Phaseolus*) are gathered. Several edible roots and bulbs are collected which include *Dioscorea* (*camote del cerro*), *Phaseolus* (*jicama del cerro*), *Allium* (*surups*), *Dahlia* (*charahuasca*), etc. There is some gather-

ing of water cresses and the edible seeds and rootstocks of waterlilies (*Nymphaea*). Several mushrooms are eaten on occasion. Of considerable importance are the fruits (some eaten raw, others cooked as vegetables) of several solanums, especially one known as *pichecuas*, which is gathered from August to November; the *ucuares*, which seems to be a *Valeriana*, and which is gathered from February to June; and the fruits of several species of *Gonolobus* and *Asclepias*, known as *talayotes* and *chicuipos*, which are gathered from August to December when not quite ripe and are cooked and eaten like young pumpkins. Also, the fruit of a wild *Rhus*, which resembles our lemon-berry and is called *limita*, is gathered in June and July.

Although the collection and use of wild plants for medicinal purposes is still of considerable importance in the area, we did not have the time to go into this matter thoroughly. Apparently there are hundreds of plants which are widely known and used for a great number of ailments, in addition to the medicinal herbs known only to the professional herb doctors. It seemed that almost every other plant we collected or asked about had some use. Among the more famous or common medicinal plants are the following: An *Aristolochia* (*yerba del Indio*, *guaco*, *pehuame*) used for animal bites, stomach aches, etc.; a number of *yerbas del golpe* (*Allionia*, *Oenothera*, etc.) used in poultices and teas for bruises and inflammations; a *Begonia* and the *chupire* (*Euphorbia calyculata* H. B. K.) used for venereal diseases; *tabardillo* or *cuiniqui-cumanchicua* (*Piqueria trinervia* Cav.) used for fevers; a number of daturas and nicotianas with many uses; and a long list of plants made into teas as diuretics, for colic, for constipation, for colds and chest complaints, etc., among which are ferns (*Adiantum* and *Polypodium*), nettles (*Urtica*), legumes (*Lupinus*, etc.), mints of several genera, *Lantana*, *Buddleia*, *Anoda*, *Loeselia*, *Smilax*, *Clematis*, *Eupatorium*, *Gnaphalium*, *Tagetes*, *Bidens*, etc., etc. The most common forms of application are in teas and poultices. There should be mentioned here the most famous medicine to come out of the New World in the sixteenth century (besides tobacco), namely the purgative *raíz de Michoacán* or "root of Michoacán." Hundreds of pages have been written since the days of Monardes and Hernández attempting to identify this plant. From all the available information it seems to belong either to the Apocynaceae, Asclepiadaceae, or the

Convolvulaceae. The latter identification is most likely. Probably the *raiz de Michoacán*, known as *pusqua* and *tacuache*, is an *Ipomoea* closely related to the jalap of commerce. However, we found no use of such a purgative in Quiroga. A number of wild plants are quite poisonous, and some of these are utilized for insecticides and raticides; e. g., the juice of a *Senecio* known as *clarincillo*, which sometimes poisons cattle, is mixed with brown sugar to produce an ant killer.

Other uses of wild plants are for dyes, oils, tannins, fibers, ornament, ink, and mucilage. At present commercial dyes and pigments have replaced most of the native coloring matters, but some of them are still used to a slight extent. Among the better known dye plants are *tiripo* or lovevine (*Cuscuta tinctoria* Mart.), mistletoe (*Psittacanthus* and other genera), indigo (*Indigofera*), *mucle* (*Jacobinia spicigera* (Schlecht.) Bailey), *palo azul* (*Garrya*), and *conguera* (*Phytolacca*). Most of these produce blue to purple colors. The *mucle* is especially important since it not only produces a good blue to purple dye, but a solution is used to whiten clothes, and infusions of the leaf are used as a remedy for dysentery, fevers, gonorrhea, etc. Formerly oils were obtained from *chia* (*Salvia*), pumpkin seeds (*Cucurbita*), and *chicalote* or prickly poppy (*Argemone mexicana* L. and related species). By the nineteenth century oils from *chia* and pumpkin seed were very little used, but castor-bean oil (*Ricinus communis* L.) from cultivated and escaped plants was produced commercially from December to April for use in illuminating churches. *Chicalote* oil continued to be produced in important quantities, primarily for the makers of *bateas*, e. g., in 1883 Quiroga produced 80 *arrobos* (about 320 gallons) of *chicalote* oil—almost entirely from wild plants which spring up in abandoned or fallowed fields. At present *chicalote* oil is made only by individual *batea* workers in El Calvario to use in filling special orders for old-style *bateas*. The principal vegetable tannin used in Quiroga is *cascalote* from the *tierra caliente*, but second in importance is *timben* or *raicilla de Tzintzuntzan* (*Calliandra anomala* (Kunth) Macbr.), which is gathered on the slopes near Tzintzuntzan and elsewhere in the region. The *timben* roots are sold at \$2 an *arroba*, and the tannin is obtained from the root cortex. Many other vegetable substances have been used for tannin (such as oak galls, *Acacia* bark, oak bark,

etc.), but they are unimportant at present. Some of the tannin sources and mistletoe formerly were used in the manufacture of ink, but all ink is now purchased from the outside. The wild fibers are used for some five or six purposes. Due to the large export business in chairs, *bateas*, pottery, and other items requiring packing, there is a considerable demand for packing material. In lieu of paper, sawdust, and excelsior, the packers in Quiroga use a variety of grasses, *tabardillo* (*Piqueria trinervia*) from uncultivated fields, *heno* or *tácarí* (*Tillandsia usneoides* L.) gathered on oaks and firs, *aceitilla* (*Bidens*), *barba de chivo* (*Clematis dioica* L.), and other soft or pliable plants. Cattails or *tulillo* (*Typha* spp.) and tule or *chuspata* (*Cyperus laevigatus* L. and other species) are used in large quantities for the weaving of chair bottoms, but practically all tule used in the chair industry is brought in from the marshes of Tecacho and Chucándiro to the north. The cattails are also used in decorations for Corpus Christi and other festivals. The local bulrush, tule or *patzimu* (*Scirpus californicus* Britt.), is the principal species used in making of *petates* or mats. However, since Santa Fe owns most of the lake front near Quiroga, it is the people of Santa Fe who harvest the *patzimu* periodically and who make the *petates*. The people of Quiroga buy most of their mats from Santa Fe and Tzintzuntzan salesmen who come to the Quiroga plaza. Two or three persons in Quiroga make baskets and weave hats, but the material is chiefly palm leaves and fibers brought from the *tierra caliente*. Occasionally a person in Quiroga or one of the ranchos will elaborate fiber (*pita*, *nequén*, *ixtle*) from local *maguey* leaves, to make cordage and bagging, but practically all of the fiber is imported in processed form (cords, ropes, bags, mats, etc.) from the states to the north and east. Brooms and brushes are made from the roots of *zurumuta* or *zacatón* (*Epicampes macroura* Benth.) and some other grasses, and from the stems and foliage of *carátacua* (*Baccharis conferta* H. B. K., *B. heterophylla* H. B. K., and *B. ramulosa* (D. C.) Gray) which is known also as *escobilla* and *jara*. There is use of yucca fiber for a variety of purposes. Bulbs of a number of orchids are used for mucilage (this was the former source of the adhesive used in making feather mosaics), medicine, and ornament. Although many wild plants of the area have lovely flowers, the only ones that are com-

monly gathered are certain of the orchids. Thousands of orchids are used annually in decorating the churches, churchyards, and cemeteries at various religious festivals, especially Corpus Christi (when the *Flor de Corpus*, *Laelia speciosa*, is used) and All Souls' Day (when two orchids, *Laelia autumnalis* and *Bletia campanulata*, known as *Flor de Muertos*, *Flor de Animas*, and *Flor de Santos*, are used). When a family is too poor to buy soap it may use some of the *amoles* or saponaceous roots of several of the agaves, yuccas, and related plants.

Although the list of uses of wild plants is by no means completed, we will close this section by mentioning the large canes or *carrizos* (*Arundo donax* L.) which grow along the arroyos and ditches in town and near some of the lowland springs, and which are used for such items as frameworks for fireworks, carrying crates or *huacales*, and beds. Despite the space that we have devoted to a discussion of collected plants, they actually do not occupy an important place in the life of a majority of the people of Quiroga. Since clearings have pushed the vegetated areas back from the immediate vicinity of Quiroga town, and because of the paved highway and the many passenger and freight vehicles that pass over it, it is now much simpler to purchase most of the items (or the equivalents) which formerly were gathered, and possibly the time saved is spent to better advantage in pursuing regular gainful vocations.

WILD ANIMALS

Very little hunting or fishing is done by the inhabitants of the Quiroga area. Since they have no lake rights they neither catch fish nor hunt ducks. These items are purchased from peoples of Santa Fe, Tzintzuntzan, and other lake communities. There is not one professional hunter and there are scarcely more than six or eight persons who hunt consistently, either for pleasure or for food. This is far different from the conditions which obtained before the coming of the Spaniards. In prehistoric times (according to the evidence from archeology and the *Relación de Michoacán*), fishing for the various fish of the lake, hunting such birds as ducks, quails, and doves (and possibly wild turkeys and chachalacas), and hunting of deer, rabbits, squirrels, small rodents (gophers and rats), peccaries, armadillos, and carnivores (jaguars, mountain lions, wolves, coyotes, etc.) for

flesh and skins were very important. Further, more, zoos and aviaries were maintained. Now Quiroga has no lake rights, the forests have been extensively cut down, domesticated animals supply most of the requirements of flesh and skins, and the number of all game animals has been reduced to such an extent that some species are extinct in the area. Among the animals which have become extinct in the Quiroga area within the past 50 to 100 years are peccaries, wolves, jaguars, pumas, wild turkeys, and chachalacas. There are reported to be only a dozen or so deer left in the highlands back of Quiroga. Although there is no consistent hunting, quite a few individuals go out occasionally to shoot for food—principally rabbits and squirrels, and a rare armadillo, deer, or opossum. Firearms (shotguns and rifles) are most commonly used. There is no use of bows and arrows. Boys may employ slings, traps, and snares for the smaller mammals and birds. There are no large ferocious animals left in the area, but some of the smaller carnivores (coyotes, foxes, ring-tailed cats, bobcats, raccoons, skunks and weasels) which attack lambs, calves, and poultry, and the rodents (rabbits, squirrels, gophers) which eat the field crops are killed when the circumstances are convenient. There is practically no hunting of birds, since the doves and quails do not justify the expenditure of ammunition. Occasionally the young of deer, rabbits, squirrels, raccoons, and foxes are caught and brought up as household pets. Also a few solitaires, linnets, mockingbirds, and doves are caught and kept as caged pets. There are no important bat caves, and the use of bat guano is rare. No birds are caught or killed for their feathers, although the feathers of domestic poultry are sometimes used in making dusters. From time to time the hives of wild bees are raided for honey, but this practice is not common. There is no eating of grubs, grasshoppers, snakes, lizards, salamanders, turtles, or frogs, such as obtains in some other parts of Mexico. Neither are the eggs or *ahuautli* of the local "water cricket" collected and eaten. In terms of positive economic use wild animals are quite unimportant.

In terms of diseases carried, depredations on crops and stores, and folklore, a considerable number of animals are involved. The most common arthropods in the settlements are a great variety of flies (*moscas*), cockroaches (*cucarachas*), fleas

(*pulgas*), spiders (of which only the black widow and the tarantula are locally noted), weevils, dung beetles, ants, wasps (including a vicious type, known as *jicote*), mosquitoes (*moscos* or *zancudos*), bedbugs (*chinchas*), lice (*piojos*), and chicken mites. Although feared and disliked, there are comparatively few ticks (*garapatas* or *turicatas*), *niguas* (*Tunga penetrans*), *jijenes* (*Simulium* sp.), centipedes (*cien pies*), or scorpions (*alacranes*). The most common diseases in which arthropods are vectors are typhoid, dysentery, malaria, and typhus. Represented on archeologic artifacts of the area and often referred to in folklore are butterflies, beetles, grasshoppers, ants, spiders, and scorpions. Seashells were imported by the prehistoric Tarascans, but at present mollusks are seldom eaten and only occasionally does a seashell for medicinal use appear in the market. Amphibians and reptilians are not numerous, although the ancient Tarascans used turtle carapaces for musical instruments, and they represented snakes, turtles, frogs, lizards, crocodilians, and salamanders in metal, stone, and terra cotta. The leopard frog, garter snakes, and lizards (chiefly spiny swifts) are the most common of these creatures at present. Frogs, garter snakes, gopher snakes, racers, rattlesnakes, "flying snakes," "horned snakes," and poisonous lizards are most commonly mentioned in traditions and folklore. There are only a few poisonous reptilians in the area, chiefly three species of rattlesnakes (*viboras de cascabel*), and two species of lyre snakes (*pichocuate*). The so-called coral snake or *coralillo* in Quiroga is a kingsnake, and the *escorpión* is a harmless *Eumeces*. Many birds were used by the prehistoric Tarascans as decorative motifs (including hawks or eagles, ducks, turkeys, parrots, owls, hummingbirds, etc.). In folklore and place names, the most common birds are the hummingbird, curve-billed thrasher, brown towhee, ducks, hawks, owls, and doves. The dominant birds in the settlements are linnets, wrens, warblers, thrashers, towhees, swallows, swifts, doves, sparrows, and buzzards. In the fields and in the highland woods there are numerous kingbirds, hawks, ravens, cowbirds, blackbirds, jays, woodpeckers, flycatchers, orioles, and other birds. The birds and fishes of the lake are not mentioned because they are not part of the Quiroga scene. The mammals represented by the greatest number of

individuals are rodents, bats, rabbits, shrews, and carnivores, with opossums, armadillos, and deer far behind. The scourges of the field crops are the ground squirrels, cottontail rabbits, gophers, and several species of rats and mice. Among the carnivores there are definitely present in the Quiroga area one species of raccoon (known as *mapache* and *tejón*), one ringtailed cat (locally and incorrectly called a *tlalcoyote*), one weasel (*cuiniqui*, *onzita*, *comadreja*), three skunks (*zorrito* and *zorilla*, and specific names), one gray fox (*zorro* and *zorra*), one bobcat (*gato montés*, *mits-papu*), and occasional stray pumas, ocelots, and jaguars. The most common mammalian subjects of superstitions, stories, and other elements of folklore are coyotes, dogs, raccoons, skunks, opossums, deer, bats, gophers, squirrels, rabbits, jaguars, and pumas.

MINERALS

The entire Quiroga area is dominated by volcanic rocks (andesitic and basaltic lavas, breccias, tuffs, and sands) and their derivatives. Quiroga and the Pátzcuaro Basin lie between the highly mineralized silver-lead zone of Guanajuato on the north and the copper-gold zone of the Balsas on the south. The absence of rhyolites, latites, and hornblende andesites (which in Mexico are so rich in metals) undoubtedly is the key to the paucity of metals and mines in the region of Quiroga. There are no mines worked in the *municipio* of Quiroga. Beaumont records that gold dust formerly was obtained from the red earths in the vicinity of Tzintzuntzan; gold has been reported for Acuitzio, Charo, Cuitzeo, Copándaro, Queréndaro, and Tarímbaro; gold was listed as an item of tribute from villages in the vicinity in the sixteenth century; and gold was worked and used by the Tarascans in the Pátzcuaro Basin according to the *Relación de Michoacán* and archeologic finds. No gold has ever been reported for the Quiroga area proper. Silver ore has been obtained from the northern flanks of Tzirate near Tere-mendo, and from Nahuatzen, Cuitzeo, Queréndaro, and Acuitzio in the general region. Silver also is mentioned in the *Relación de Michoacán*, and has been found archeologically in the region. Copper ranks, with gold and silver, among the three metals most often mentioned in the *Relación de Michoacán*; and it was the metal most used

by the prehistoric inhabitants of the Pátzcuaro Basin. However, most of it must have been brought in from the south since no copper ores are known from the basin, and the nearest deposits at Nahuatzen and Acuitzio apparently were not worth working. A few deposits of lead, tin, and

iron exist to the east and south, outside of the Pátzcuaro Basin.

The Tarascans had a fair knowledge of metals and metallurgy, including the art of gilding copper. They recognized at least six metals for which we have the following names:

English	Tarascan	Mexicano	Spanish
Metal.....	Tiamu.....	Tepuztli.....	Metal.
Gold.....	Tiripeti.....	Cuztic teocuitlatl.....	Oro.
Silver.....	Tayacata.....	Iztac teocuitlatl, or Temetztl.....	Plata.
Tin.....	Itzi tayacata.....	Amochitl.....	Estaño.
Lead.....	Pacapeti itzi tayacata.....	Temetztl.....	Plomo.
Iron.....	Pacapeti tiamu.....	Tilitic tepuztli.....	Hierro.
Copper.....	Charapeti tiamu.....	Chichiltic tepuztli.....	Cobre.

Certain rocks, earths and clays are the most important mineral resources of the area, other than the arable soils. An enormous amount of unshaped basalt rock has been used in fences, and, to a lesser extent in house walls in the ranchos. A few structures in the *municipio* (churches, municipal palace, fountains, houses of the well-to-do, sidewalks, tombstones, etc.) are constructed in whole or in part of quarried stone. Most of this cut stone is derived from local quarries or *canteras*. The chief source is an andesitic outcrop on the southern flank of Tzirate. However, several closer quarries of andesite and andesitic tuff have been worked in the past. Also, reddish vesicular basalt and basaltic tuffs are quarried at times for cut stones to be used in masonry, or in crushed form as road metal. Most of the basaltic material has come from the scarp of the Cerro Huarapo and from pits and cuts in the Cerro Tukurullo and the Cerro de la Muñeca (Cerro de la Mina). The prehistoric grinding stones (metates, manos, mortars, pestles) may have been made from local basalts, but now the elaborated stones are purchased in Morelia and Pátzcuaro, and locally from peddlers who bring their products from the Pueblo de San Nicolás Obispo at the foot of the Cerro del Aguila. In the local archeologic sites are found idols, maces, hammers, picks, and axes which are predominantly of basalt. Laminated or slabby dike rocks provide some flagging, and may have been used also for prehistoric hoes.

Obsidian knives, arrowheads, mirrors, and ornaments are found frequently over the *municipio*, but all of the obsidian must have been brought in

from such sources as Zinapécuaro and Zináparo. The salt mentioned in the Relación de Michoacán probably came from Lake Cuitzeo (Araró) or else from *salinas* in México, Guerrero, and Jalisco. *Turquesas* (turquoise) and *charchuis* (possibly jadeite) are mentioned in the Relación de Michoacán, and ornaments of jadeite, turquoise, and serpentine are found archeologically in and around Quiroga. However, there are no known deposits of these minerals in the Pátzcuaro Basin. The most probable sources are in the Ucareo-Maravatio area and in the Balsas Basin. Various forms of quartz occur in the local lavas, but probably all of the flints, jaspers, agates, and opals found archeologically or mentioned in the literature for the Pátzcuaro Basin were brought in from Maravatio, Guanajuato, and Querétaro. The chief source of sulfur, since before the Conquest, has been the Ciudad Hidalgo-Volcán San Andrés area. Lime is now obtained chiefly from merchants in Morelia and Pátzcuaro. Small quantities are produced in the *municipio* of Acuitzio. Some 70 years ago a deposit of niter or saltpeter (potassium nitrate, KNO_3) somewhere on Tzirate was reportedly worked for use in fireworks. We were unable to locate this "mina de salitre de cohetes" or "tierras impregnadas de sales nitrosas," which probably was a thin crust or efflorescence on the walls of some cave such as is known near Jerécuaro in Guanajuato.

All of the above-mentioned rocks and minerals are known locally by one or more names (Spanish, Tarascan, Mexicano). Among the more important terms are:

English	Spanish	Tarascan	Mezicano
Quarry.....	Cantera.....	Tzacapu haracuqua.....	(?).
Mine.....	Mina.....	(?).....	(?).
Stone.....	Piedra.....	Tzacapu.....	Tetl.
Flagstone, flat stone.....	Piedra laja.....	Huiramba.....	Piastli.
Vesicular basalt, and some andesitic and basaltic tuffs.	"Tesontli".....	Janamu, xanamu.....	Tetzontli.
Obsidian.....	Obsidiana.....	Tzinapu, Chinapo.....	Itztli, Itztetl.
Flint.....	Pedernal, Silicio.....	(?).....	Tecpatl.
Salt.....	Sal.....	Etucua.....	Iztatl.
Lime, limestone.....	Cal, caliza.....	Hapu tzacapu curiracata.....	Tenextetl.
Sulfur (stone).....	Azufre, piedra de.....	Tzacapu quinguimari.....	Tlequiquiztlalli.
Turquoise.....	Turquesa.....	Maruaticuacari.....	Xihuítl, Teoxihuítl.
Jadeite.....	Jade.....	(?).....	Chalchihuítl.
Marble.....	Marmol.....	Itzimaruaati.....	(?).
Gypsum.....	Yeso.....	Uiras.....	(?).
Alum.....	Alumbre.....	Jaripu.....	(?).
Crystal.....	Cristal.....	Tzarati.....	(?).
Lodestone.....	Piedra iman.....	Maruati tzacapu tirimariri.....	(?).

Black volcanic sands (near the Cerro Divisadero, the Mesa de Cutzaro, and the Cerro Hueco, on the slopes of Tzirate and Chino, and near Icuácato) are used in surfacing roads and yards, in making cement, and in tempering various clays. Because of the lack or paucity of rhyolites and hornblende andesites, there is little high-grade potters clay in the Quiroga area. Although no pottery is made in Quiroga, the local red clays seem to be as good as those obtained by the potters of Tzintzuntzan on the lower slopes of Tariácuri or by the potters of Santa Fe in the banks of the arroyos that descend from the Mesa de Santa Fe and the Cerro Guayameo. However, there are small deposits of white clays (seemingly of the kaolinite group) near Purenchécuaro and Chupícuaro used by Santa Fe; and a white clay or "piedra blanca" used in Tzintzuntzan is said to come from near La Tirímicua above Quiroga. We were unable to locate this deposit, which may have given the alternative name of Cerro de la Mina to the Cerro

de la Muñeca. On occasion workable deposits of kaolin may be produced in basalts by alteration. Currently, the best clays in the general region are said to come from near Puruándiro, Zináparo, and the State of Guanajuato. Certain earths are used in producing the base or *maque* on the "lacquered" wares of Quiroga. The *tierra colorada* or red earth is obtained on the slopes of the Cerro de la Muñeca and elsewhere near La Tirímicua. The black earth or *tierra negra* is an earth rich in humus formed under the oak trees and on the wooded slopes of the area. Analyses of these two earths are given later with the discussion of Quiroga "lacquer" work. Large quantities of reddish clay within Quiroga and on the upper outskirts of town are used in the making of bricks, tiles, and other fired products. Also, the adobes (sun-dried bricks) for houses and walls are commonly made from grayish clay soils within Quiroga and the ranchos. These industries are discussed later. Some of the local terms are:

English	Spanish	Tarascan	Mezicano
Sand.....	Arena.....	Cutzari.....	Xalli.
Ash, tuff.....	Ceniza, toba.....	Hapu.....	(?).
Earth, soil.....	Tierra, suelo.....	Echeri, Echerendo.....	Tlalli, Tlalpantli.
Clay, mud.....	Arcilla, barro, lodo.....	Atzimu.....	Zoquítl, Zoquipololli.
"Adobe".....	Adobe.....	(?).....	Xamil.
Red earth.....	Tierra bermeja, colorada.....	Charanda.....	Tlalcuztli.
White earth.....	Tierra blanca.....	Hapupata, Uiras.....	(?).
Black earth.....	Tierra negra, prieta.....	Tucura (humus).....	(?).
Sun-dried brick.....	Adobe.....	Yahuarucata.....	(?).

URBAN OCCUPATIONS

The farmers, farm laborers, wood cutters, charcoal burners, and *batelleros* constitute the rural workers (those who gain their livelihood mainly by work in the country), who live both in Quiroga and in the ranchos. Practically all of the others gainfully employed work and reside within Quiroga town, with the exception of the 31 men employed in transportation. Various categories can be set up (such as cottage crafts, food processing, building trades, etc.), but these categories are not mutually exclusive, and some individuals carry on several occupations at the same time or during 1 season or 1 year. For convenience in discussion we have used several conventional groupings, but these categories are not important in themselves. The important categories are the individual occupations, crafts or guilds (*gremios*), but the majority of the forms of employment were never organized into recognized guilds. Since the *gremio* as developed in Mexico was primarily for the protection of the interests of the members and for religious purposes, there has been a steady decline in its importance along with the decrease of the power of the church and with the improvement of the position of labor. The *gremios* in Quiroga retain very little of the earlier guild organization excepting a few officers whose main function is to collect money for the masses, fireworks, and other expenses connected with their traditional festivals. These festivals occur on the days of the patron saints of the various guilds. Also a number of the guilds contribute toward the expense of masses, fireworks, music, etc., during outstanding general holidays (such as Corpus Christi, and the day of San Diego—patron saint of Quiroga), and they likewise contribute to masses on specified days during the highly religious month of May (the month of Mary). There is no general agreement as to what crafts and occupations had guilds at one time or another in Quiroga. The consensus is that there were guilds of at least the bakers, weavers, shoemakers, masons, tanners, carpenters, and *arrieros*, and that during the nineteenth century the *arriero* guild was the strongest. At least the first three groups are still functioning, since each paid for the masses for one day in May of 1945. The farmers were once united loosely in support of the festival for

their patron saint, San Isidro, which falls on May 15, but we observed no special festivities on this day while we were in Quiroga. Probably the agrarian *ejidal* organization has supplanted whatever other organization of farmers once may have existed. Although the Franciscan missionaries or Bishop Quiroga "assigned" the craft or *oficio* of working and decorating items of wood (principally *bateas*, chests, and writing tables) to the inhabitants of Cocupao-Quiroga, there seems to be no present organization other than a participation of some *batelleros* in the Corpus Christi festivities. A worth-while and much neglected field of research in economic history would be the study of the various *gremios* in Mexico. So far only the silversmithing guild has received much study.

COTTAGE CRAFTS

The term "cottage crafts," if literally applied to every type of manufacture or elaboration of goods within the home, would embrace the majority of constructive occupations in Quiroga, since nearly everything from weaving serapes and decorating *bateas* to making or repairing shoes, baking bread, and tanning hides is done in the home. However, this matter is complicated by two circumstances. A few central workshops have been established in the recently developed chair and woodturning business, and part of the work is done in these shops and part is farmed out and done in private homes by carpenters, painters, etc. Also, some of the weavers, bakers, painters, shoemakers, tanners, and others have large enough establishments in their homes to justify bringing in other workers. Under such an arrangement the situation is reminiscent of the organization of European trade guilds. The proprietor or *patrón*, who also works, is presumably the most skilled worker and is often referred to as *maestro* or "master." The skilled and semiskilled workers who come in daily are termed *oficiales*, *obreros*, *jornaleros*, and *peones*, which would be equivalent to "journeyman." If an individual craftsman is not definitely employed at some establishment he will be referred to as an itinerant journeyman; e. g., *obrajero obrero ambulante* or "itinerant journeyman weaver." Apprentices are usually of the family of the proprietor, and are known as family helpers; e. g., *obrajero ayuda familia*.

BATEAS

The most important cottage craft, until the appearance a few years ago of the chair industry, was the making of *bateas*, chests, and writing tables. Only the *bateas* are now made, and it is difficult to locate any of the painted wooden chests and writing tables outside of museums. During most of the colonial period Cocupao was widely known for these manufactures whose beginnings are commonly assigned to Bishop Quiroga. By 1822 the writing desks or *escritorios* had dropped out of the picture, and Martínez de Lejarza (1824) mentions only *bateas y cazas pintadas*. In 1884 both *bateas* and painted chests were produced in important numbers according to León (1887-88). From what we could learn in Quiroga, it seems that painted chests and trunks ceased to be made about the turn of the century or shortly before the Madero Revolution. It is fruitless to attempt to determine whether the Franciscan missionaries or Don Vasco de Quiroga assigned to Cocupao the *oficio* of woodworking. The essential fact is that some time between approximately 1530 and 1560 an attempt was made to balance the economies of the Indian villages in the Province of Michoacán by assigning to each village within a region a distinctive handicraft or occupation and a market day which would not conflict with those of its neighbors. According to this plan Tzintzuntzan was assigned pottery making, the tanning of hides was given to Teremendo, Capula was authorized to cut timber, etc. The origin of woodworking in Quiroga cannot be determined. Apparently the making of chests, trunks, and writing tables was a Spanish innovation. The painting or "lacquering" of wooden bowls and trays (*bateas*) probably is native, but this cannot be proved in the case of Quiroga. We know, from the *Relación de Michoacán* and other sources, that the Tarascans of the Pátzcuaro Lake Basin had the specific occupations of woodsmen, carpenters, makers of drums, canoe makers and makers of oars, painters in general, and painters of *xicales* (presumably half-calabash bowls, but possibly wooden bowls), and other workers with wood. From archeologic finds and from early sixteenth-century records we know that a variety of gourds and calabashes (*Crescentia cujete* L.) were decorated before the

arrival of the Spaniards. The moot point is whether wooden bowls also were painted. In this report we are not concerned with the controversy over the Tarascan or Mexican origin of lacquer decoration since the technique used in Quiroga is definitely not lacquering or encrustation of the Japanese and Chinese types. Although some people believe that the Quiroga technique has degenerated from a technique that once was identical with that used in Uruapan, we could find no evidence for such a change. The principal changes have been in substituting linseed oil and pigments purchased at the store for local *chicalote* oil and pigments, and in the designs.

We have already outlined the making of the crude bowl or *batea en blanco*. When the *batellero* brings in the crude *bateas* they are given to members of his family to be slipped or are consigned to some woman who specializes in *maquea* and who does not have a *batellero* in her family. However, there are some painters who purchase the *bateas* and farm them out to be slipped. Also, there are some merchants who buy *bateas* and contract with various individuals for the operations from slipping through "varnishing" to painting. Let us start with the operation of the *maquea* or slipping. This is always done by women and girls, practically all of whom live in El Calvario (one woman lives in *cuartel* I, and three or four women live in *cuarteles* II and III outside of the Calvario area). The number of women who *maquean* varies considerably, since this work is done in addition to the regular household chores. The 1940 census did not list any *maqueadoras*, but we found 44 women and girls, between the ages of 10 and 60, who were doing this work in the winter and spring of 1945. The time they devoted to *maqueando* varied from only a part of one or two days in a week up to full time employment (in the case of a few unmarried and widowed women who were not loaded with the full responsibility of running a home). More than half of the *maqueadoras* were in families which had one or more *batelleros*. The equipment consists of a metate (*tlalmetate*), usually legless (*ticuiche*) and of a smooth grain, and *mano* or muller for grinding the earths used in the slip; a *zalea* or piece of sheepskin with which to apply the slip; and a *trapo* or rag of linen, hemp, or cotton used to burnish. The raw materials, besides the *bateas en blanco*,

include two kinds of earths, linseed oil, *japán* or japan drier, and lampblack. The earths may be purchased from some individuals in El Calvario (from 10¢ a half kilogram down to \$2 for a burroload of two bags of uncertain weight), or the *maqueadora* may herself go to one of several hills in the Quiroga-La Tirimicua area (La Muñeca, Cerro Chino, etc.) and dig whatever she needs. It was not uncommon to see a woman and several children coming down the trail with *bateas* full of reddish or blackish earths. One of the earths was referred to as *tierra colorada*, and seemed to be simply very hard clods of reddish earth. All that is done to prepare the *tierra colorada* is to grind it to a very fine powder on the metate. The other blackish earth is called *tierra negra* and *tierra prieta de encino*, and is country soil mixed with humus which is obtained beneath oak trees. This blackish earth is burned or roasted, ground to powder on the metate, and mixed with lampblack. The soot or *tizne* is obtained from petroleum (*humo de petroleo*), from pitch pine (*humo de ocote*), from the interior of corncobs (*humo de olote*), etc. Through the courtesy of the Geological Institute of the National University of Mexico we obtained analyses of these two earths. The results surprised us, especially as to the respective proportions of organic material, but we present them for whatever they are worth.

	Tierra negra or tierra tocura	Tierra colorada or tierra charanda
	Percent	Percent
H ₂ O (water)-----	4. 98	1. 66
SiO ₂ (silica)-----	35. 03	38. 35
Al ₂ O ₃ (alumina)-----	15. 57	18. 89
Fe ₂ O ₃ (ferric oxide)-----	1. 00	3. 30
FeO (ferrous oxide)-----	1. 81	-----
MnO (manganous oxide)-----	. 05	. 08
CaO (calcium oxide)-----	1. 43	1. 79
MgO (magnesia)-----	. 04	. 07
Na (sodium)-----	. 19	. 10
NH ₃ (ammonia)-----	. 15	-----
TiO ₂ (titanium dioxide)-----	. 05	. 08
Cl (chlorine)-----	. 30	. 15
P ₂ O ₅ (phosphoric pentoxide)-----	1. 00	1. 33
SO ₃ (sulfur trioxide)-----	1. 43	1. 49
Unidentified organic-----	36. 99	32. 76
	100. 02	100. 05

It is quite evident from the above analyses that the people of Quiroga do not use two earths presumably very important in the Uruapan technique, namely a dolomite known as *tepützuta*, and a ferruginous lime called *igüetacua*. On the other

hand, the *tierra colorada* of Quiroga seems to be very close to or identical with the *hehuetacua* of Uruapan, used for red exteriors and backgrounds. Both contain hematite or red ochre as the coloring pigment.

The first step in the application of the slip or *maque* is to apply the linseed oil (mixed with japan drier in proportions of two to one) as priming, then add the powdered *tierra negra* to the interior or concave surface, and let dry in the sun for 1½ to 2 hours. A variation of this procedure is to apply the oil, then the straight *tierra negra*, and finally the *tizne* or lampblack which has not previously been mixed with the *tierra negra*. A common variation is to mix the linseed oil and japan drier with the *tierra negra* and *tizne* and apply the composition with the *zalea*. Thus far the main difference from the classic Uruapan technique is that dolomite (*tepützuta*) and the rendered fat or grease of the *axin Coccus* are not used in the basic composition. Although some people term the *maque* composition a lacquer (*laca*) or a varnish (*barniz*), it is neither. No lacquer (exudation of a *Rhus*) is used, and the only gummy or resinous material is that in the japan drier. Presumably the oil of *chia* (*Salvia*) is superior to all others in making the *maque*, but none has been used locally within the memory of any of the people. During the nineteenth century or earlier *chia* oil was supplanted by oil from the *chicalote* poppy (*Argemone*), and now this oil has been supplanted almost completely by linseed oil. It is claimed that the common use of *chicalote* oil (both in slipping and in painting) ended some time prior to 1918. On occasion *chicalote* oil is still used on special orders (commonly from *arrieros*), and then it is for a green *maque* or slip rather than the predominant black. To prepare this oil some *chicalote* seed is toasted, ground on a metate, mixed with hot water, and the oil that rises to the surface is absorbed by a rag which is squeezed into a calabash *tecomate*. Sometimes the ground *chicalote* or *masa* is placed in a cloth bag and the oil is squeezed out. The green for this special *maque* is obtained by mixing naples yellow, prussian blue, and gypsum. The final step for the interior *maquea* (black or green) is to polish vigorously with the cloth or *trapo*. The exterior *maque* is invariably red, and is always applied after the interior has been slipped. The procedure is essentially the same as for the black *maquea*, excepting that only

tierra colorada is used with linseed oil and the japan drier. When only a small number of *bateas* are worked all steps of the *maquea* are completed within 1 day, but if several dozen *bateas* are being worked usually the black is applied and polished one day and the job is completed the next day.

The number of *bateas* that can be completed in 1 day varies with the age and skill of the worker, how much time she can spare from household duties, and the size of the *bateas*. Because of these factors we found great differences in output per day or week of any given size, and the women could not estimate rate of work in terms of hours. We calculated range, average, and mode for the time consumed on different sizes, but we do not feel that these figures are very accurate or significant. The basic consideration is the size of the *batea*. Apparently there are two systems of classification (one traditional, and the other possibly established by some of the merchants) which overlap somewhat and occasion much confusion. The traditional system may have begun with the Spanish yard and subdivisions, which became converted into metric equivalents, of which there exist the sizes known as *frutera* (fruit bowl or fruit tray), *media frutera*, *chuchería*, *cuarta* or *chica*, and *jeme*. The newer system goes by numbers (theoretically from 1 to 4 or 5), of which only 2, 3, and 4 are used. Due to the lack of large trees, practically no *bateas* larger than 50 cm. in diameter are made, and the largest fall into the *media frutera* and *chuchería* classes. It was reported that once in a long time *bateas* $\frac{3}{4}$ of a meter, 1 meter, and even larger were made, and these were referred to as *especiales*. In such cases the bowls often took on the oval or oblong form of a tray. The following tabulation gives the names and ranges we obtained for the various sizes.

Traditional	Recent	Diameter (cm.)
Especial-----	-----	(?).
Frutera-----	-----	(?).
Media frutera-----	-----	50-80.
Chuchería-----	Dos (2)-----	Ca. 45.
	Tres (3)-----	34-40, mainly 36-38.
	Cuatro (4)---	30-34, average 32.
Cuarta or chica---	-----	25-27, usually 26.
Jeme-----	-----	Ca. 16.

Also, tiny *bateas* (known as *bateitas*) are made for use as earring pendants (*aretes*), and these are known as of the size of a peso or a half peso (*tostón*). Probably more than 90 percent of the *bateas* made in Quiroga are *cuarta*, *cuatro*, and *tres*. Locally

there seems to be much confusion between *cuarta* and *cuatro*, and between *tres* and *chuchería*—at least among the *maqueadoras*. Production of No. 3 *bateas* varied from 1.5 to 3.5 dozen a day, for which they were paid 60¢ to 85¢ a dozen—possibly an average output of 2.5 dozen a day at 75¢ a dozen. No. 4 *bateas* were slipped at rates varying from 1.5 to 5 dozen a day, with pay 60¢ to 70¢ a dozen—an average production of 3 dozen a day at 65¢ a dozen. From 1.5 to 12 dozen *cuartas* were slipped a day, for which they received 40¢ to 75¢ a dozen—averaging 3.5 dozen a day at 55¢ a dozen. This income is not net. The materials purchased may cost from 10¢ to 30¢ per dozen *bateas*. The women themselves compute an average net income of \$6 to \$7 a week derived from *maqueando*.

After the *maquea* the *bateas* go to the merchant, painter, or other entrepreneur who contracted for the work, unless they are owned in the family, in which case usually the woman who applied the slip also paints on the decorations. The majority of the *bateas* are slipped on contract. Before painting can begin a "varnish" of shellac (*japón*) dissolved in turpentine is applied. There are a few families which do nothing but apply this *barniz* to *bateas* belonging to some of the merchants, but most of the varnishing is done by the *pintores* or people who paint on the decorations. All of the painting is done in the homes of the *pintores*. The painters of Quiroga are divisible into three groups: (a) those who paint only *bateas*, of whom there are about 35; (b) those who paint *bateas*, chairs, pottery, spoons, earrings, etc., who number perhaps 20; and (c) those who paint chairs and other items, but not *bateas*. Most of the 50 to 60 people who paint *bateas* do so on contract. The painters run in age from 12 to 48, and there are a few more men than women painters. Painting is a full-time occupation excepting for those who paint only *bateas*, since there is not a sufficient supply of *bateas* for all during the rainy season. The other painters switch to painting chairs, pottery, etc., during the slack season. Equipment consists of brushes and a variety of bottles, cans, and terra-cotta jars to hold the pigments, oils, drier, turpentine, etc. The brushes are broad *brochas*, used for applying the varnish, which are purchased from the stores at prices ranging from \$1.25 to \$2, and fine *pinceles* for painting on the decorations. Most of the painters make their

own *pinceles* from the hair of dogs, cats, and squirrels. The principal materials are the pigments and paints. For backgrounds, other than the black or green of the *maquea*, prepared paints are commonly purchased in tins. Locally prepared pigments of vegetable, mineral, and animal origin prevailed into the nineteenth century. Among the more important of these were lampblack and bone-black, red and yellow ochres, yellow from *tiripo* (*Cuscuta*), blue from indigo (*Indigofera*), carmine from cochineal, and white from gypsum. At present practically all pigments are purchased in powdered form from the local stores at rates varying from \$0.20 to \$1.60 an ounce according to the color and quality. Local pigments have not been used within the memory of living persons. The most important colors are black, red and orange, green, yellow, white, blue, pink, and purple. The black is lampblack; most of the red is vermillion, with some rouge and venetian red; green is compounded from blue and yellow; yellow includes ochres and naples yellow; the white is zinc, lead, and some gypsum; most of the blue is prussian blue, with some ultramarine and cobalt; carmine and the reds are used in developing pink tints; and purple is compounded from blue and the red-rose-pink pigments and mixtures. Linseed oil (\$1.90 to \$2.50 a liter), turpentine (\$1 to \$1.30 a liter), and japan (\$0.25 an ounce dry; \$1.20 a liter liquid) complete the list of materials used. A typical painting mixture consists of 1 liter of linseed oil, 1/5 liter of japan, 500 gm. of coloring pigment (this amount varies greatly), and a little turpentine.

If not yet varnished, one coat (*una mano*) of *barniz* is applied to the *batea* and then it is placed in the sun to dry—which usually takes about 4 hours. Most of the painters decorate directly on the varnished surface, which has the black tone of the *maque* underneath. The few who occasionally paint on a cream, yellow, or other base, must apply this background. Normally the next operation after varnishing is the final decorating, which consists of painting designs in two or more colors. The most common design is a number of conventionalized flowers with leaves and stems which fill most of the field. The grouping varies from painter to painter, but most of the flowers are either clustered near the center or are distributed in a peripheral circle. There is little formal division of the field, or

arrangement of decorative elements in zones. Most of the flowers are fanciful, colorful, and resemble (in petal arrangement) either roses or composites. The orchid, contrary to practice in Uruapan, seldom is depicted. A few painters have attempted landscapes, which range from local lake and village scenes to scenes that must have been copied from postcard or other illustrations of the Alps, Japan, etc. Some painters include birds (fanciful, generalized, parrots, hummingbirds, etc.) among the flowers. We heard that at one time there was considerable depiction of humans, birds, snakes, butterflies, grasshoppers, fish, coyotes, and other animals, and the employment of mottoes and sentimental phrases, but we saw no examples of such work. The decoration is done entirely by free-hand painting and there is none of the encrustation such as is done in Uruapan, or incision as in Olinalá. The dominant colors for the flowers are yellow, white, blue, pink, and combinations of these colors. The normal sequence is to first paint the flowers (large ones, then the small flowers), then the buds if any, and finally the foliage. Some families with several painters are organized somewhat like an assembly line. One member paints only one or two elements, and then passes the *batea* to a second painter who adds his quota, and so on. If the drier used is of good quality and there is ample sunshine a completely painted *batea* will dry in 4 or 5 hours, but sometimes up to 8 days is needed. Painters (who apply varnish, background, and decoration) average \$1 a dozen for the *cuartas* which they turn out at rates from 2.5 to 6 dozen a day or an average of about 4 dozen. They receive \$1.50 a dozen for the *cuatros*, of which they paint 2 to 4 dozen a day and average about 3 dozen. The average painter can turn out 2 dozen No. 3 *bateas* a day, for which he gets \$2 a dozen. Gross earnings run from \$3 to \$10 a day, with the average probably being a little more than \$4. Net earnings may average around \$3.50 a day.

The *bateas* go from the painters to local "tourist shops," traveling merchants or agents who sell on commission, purchasers from the large curio stores in Mexico City, Morelia, Guadalajara, Zamora, and elsewhere, and are sold to or consigned to a number of small merchants who may keep a few on display in their grocery stores, restaurants, etc. Local wholesale prices (as of

the spring of 1945) averaged \$8 to \$10 a dozen for *cuartas*, \$10 to \$12 a dozen for *cuatros*, and \$14 to \$18 a dozen for *treses*. These prices were given to us by the painters and not by the curio merchants. These prices indicate that we were given consistently low figures for income per dozen *bateas* by the *batelleros*, or the *maqueadoras*, or the *pintores*, or by all three groups since the sum of the average costs per operation does not equal the wholesale price in any case. For example, the *batelleros* sold 1 dozen *bateas en blanco* of the *cuarta* size for an average price of \$5; the average cost for *maqueando* these *bateas* was \$0.55; and the average cost of painting was \$1. This totals only \$6.55 per dozen, as compared with a low wholesale figure of \$8. Perhaps the gross income of each person involved in the elaboration of *bateas* should be increased 20 to 25 percent. There was no general agreement as to how many *bateas* of all sizes were made in Quiroga each year. Estimates ran from 2,000 to more than 10,000 dozens a year. Although Quiroga *bateas* can be seen all over Mexico and in many cities of the United States, we doubt that the annual production is more than 5,000 or less than 2,500 dozen.

CHAIRS AND CARPENTERS

As indicated in the discussion of *bateas*, carpentry has been an occupation in the Pátzcuaro area since prehistoric times. During the colonial period the principal items made by the carpenters of Cocupao were chests and writing tables for export, and such items of domestic use as benches, tables, chairs, windows, and doors. However, since many of these homely items were either lacking in most homes (e. g., chairs and windows) or were home-made, the professional carpenters were not numerous. This continued to be the case until 1939 when the commercial chair industry was established in Quiroga. According to the 1940 census there were 35 carpenters in Quiroga, and by 1945 the number had risen to 58. This is an extraordinarily large number for a community where houses are not made of wood. These carpenters can be divided into three groups; (a) some seven or eight men who carry on traditional carpentry, but who never make chairs; (b) about 20 men who elaborate a variety of items from tool handles to chairs; and (c) another 20 or so men who make only chairs. All of the men in the first group and

a number from the two other groups own their carpentry shops, which usually consist of a room in the home equipped with workbench, vise, planes, hand saws, chisels, mallet, and drawshave. The majority of the carpenters concentrate on chair making, which was the leading industry in Quiroga in 1944 and 1945 but which had begun to decline in 1946 due to a reduction of orders from the United States.

The Quiroga chairs are made of pinewood, with seats of tule, in six sizes. Three general operations are involved in the manufacture of these chairs. The carpenters cut pine lumber into the required pieces and assemble the frame. Then women and children weave the tule seats onto the frames. Finally, painters varnish and decorate the chairs. Although the chair industry started in 1939 on a cottage handicraft basis, it is now concentrated in the hands of about a dozen men who own 8 workshops or *talleres de sillas* in which more than 95 percent of the chair frames are made. All of the weaving of the chair bottoms (*entulando*) is farmed out on a piece-work basis. Much of the varnishing is done by employees of the larger shops, who also pack the finished chairs for shipping. Perhaps one-third of the painting is done in paintshops attached to the chair factories, and the remainder is done in the homes of the painters.

All of the pine lumber comes from mills in the Pátzcuaro and Tacámbaro areas. The larger operators purchase the lumber at the mills and have it trucked to their shops in Quiroga at costs varying from 30¢ to 32¢ a board foot. There is one lumber dealer in Quiroga who supplies the small operators and the individual carpenters. Lumber purchased in small quantities costs from 34¢ to 45¢ a board foot. The average price of the lumber consumed in chairs is about 32¢ a board foot. The difference in cost of the lumber explains in part why there are only four or five individual carpenters who make chairs. The majority of the carpenters work full or part time in the eight shops which employ from 2 to 15 carpenters each. The number of employed or journeymen carpenters varies from 39 to 48. These numbers include quite a few individuals who are "rough carpenters"—actually manual laborers who do odd jobs in the chair shops but who are not experienced carpenters. Chair carpenters earn from \$3 to \$6 a day. The larger shops are equipped with electrically powered lathes, circular "Disston" saws,

and drills, as well as the ordinary hand tools. The lack of electrically powered tools is another reason why the chair industry does not prosper as a pure cottage craft. The first operation in making a chair frame is to cut the lumber into pieces of the appropriate sizes for the type of chair being made. There are 14 pieces to each chair: 4 rungs, 4 seat pieces, 4 legs or uprights, and 2 back pieces. The individual pieces are then planed, beveled, and perforated or slotted for fitting. After the chair is assembled it is ready to go to the home of some *entulera* for the bottom to be woven on. The amount of lumber consumed varies greatly with the sizes. There are six commonly recognized sizes which are named or numbered according to three systems. These sizes and their heights and the number of board feet employed per dozen are given in table 29.

TABLE 29—Chair sizes

Classifications	Over-all height (cm.)	Board feet used per dozen
No. 5, No. 4, Especial, Mesera tosca, and Silla Grande.	80-100	24 (av.).
No. 4, No. 3, Mesera, and Silla de Comedor.	70-85	16-23.
No. 3, No. 2, Costurera.	60-63	10-12.
No. 2, No. 1, Chamaco, Media costurera, Niño, Chica.	44-46	7-8.
No. 1, No. 0, Chiquita para niños, Niño.	30-42	(?).
No. 0, No. 00, Juguete.	18-23	(?).

The chair frames are picked up at the chair factory or warehouse on Monday morning, and all chairs taken out are returned by Saturday evening. By ingenious stacking 1 person can carry from 2 to 5 dozen of the 4 smallest sizes of chairs in 1 load, but it is not uncommon to see a large load spilled all over a street. From 50 to 100 women and children *entulan* the bottoms, the average number working in any week being around 68. About 8 percent of the chair weavers are boys, perhaps 40 percent are girls under 18, and the remainder are women. The ages run from 7 to 53. The 1940 census showed no individuals with the occupation of chair weaver, since the women and older girls do it in addition to their regular housework. The entrepreneur supplies both chair frames and the tule or *chuspata* (*Cyperus*) which is brought by truck from points along Lake Cuitzeo and also on burros from the Tecacho marshes and Lake Cuitzeo. The chief places of origin are Huandacareo, Iramuco, and Chucándiro. Two large armfuls (*manojos grandes*) con-

stitute a load (*carga* or *bulto*), which is delivered to Quiroga for \$18 to \$20. The number of chairs that can be finished in a day varies greatly with the age, skill, and other duties of the worker, and with the size of the chair. The averages run from about a dozen a week of the largest size to a gross of the smallest, and the average income is about \$1 a day.

Upon return of the chairs to the chair factories, perhaps a third are varnished and decorated by painters in paintshops or *talleres de pintura* attached to the shops. The remainder go to the homes of the painters. In addition to the score or so of painters who decorate *bateas*, chairs, and anything else to be painted, there are about 24 painters who concentrate on chairs. Normally some 30 painters are decorating chairs at any one time. The equipment and materials are about the same as for decorating *bateas*. The first operation is to apply a coating of glue or sizing (*baño de cola*), followed by an application of commercial varnish, principally of the brand known as "Brillolina." The sizing, varnishing, and drying take from 1 to 2 days. Next there are applied two coatings of already prepared paint (commonly, the brand "Piel Roja") of the desired background color—black, yellow, blue, red, green, etc. Two to four days are required for these two coatings. Finally the decorations are painted on, with the same brushes and pigments used for decorating *bateas*. The designs are small conventionalized flowers and leaves, applied to the legs, back pieces, and the seat. Often the seat will have but one large flower with stem and leaves. The more common color combinations are blue on red, red on blue, red on green, blue-red-green on yellow, and blue-red-green on black. About six dozen chairs of the most common size (*chamaco*) can be varnished, painted, and decorated in a week. This provides a net income of about \$4 a day, although a few painters earn as much as \$10 a day.

In the period 1943 to 1946 the monthly production varied from a high of more than 8,000 chairs of all sizes to a low of a little more than 4,000. During a 12-month period in 1944-45 nearly 100,000 chairs were exported, but by 1946 the exports had dropped to around 5,000 a month. In 1944 about 87 percent of the chairs were *chamaco*, 12 percent were *costurera*, and the other four sizes made up only 1 percent of the production and export. A change in orders from the

outside caused the percentages in 1945 to change to 63 percent *chamaco*, 25 percent *costurera*, 11 percent *juguete*, and 1 percent of the other three sizes. Six of the operators account for more than 90 percent of the output. These businesses vary considerably in organization. The largest (La Entuladora de Quiroga, S. R. L.) began as something of a cooperative, but it is now controlled by one man who is the brother of one of the leading merchants of regional handicrafts. The second largest enterprise is a partnership between the owner of the flourmill (who provides the chair frames) and a man whose sole business is arranging for the completion of the chairs (bottoms, sizing, varnishing, painting, decorating), packing, and sales. The third largest chair factory is run by two brothers who are primarily general merchants. The other important chair businesses are run by the brother of a handicrafts merchant, the son of the owner of one of the two corn-meal mills (*molinos de nixtamal*), and a young man who carries on some chair making but whose principal occupation is the storing, packing, and selling of the production of a number of other shops. When the chair industry was at its height about two freight carloads were shipped a month out of Morelia, chiefly to Los Angeles, Chicago, New York, and Mexico City. The chair business is still new and in an experimental period, and it remains to be seen if it will become a stable part of Quiroga economy. Since it is still listed as a new industry, it is not subject to taxation. Probably the making of chairs will sink to a secondary industry as soon as it becomes subject to taxation, especially in view of the fact that all of the materials must be brought in from a distance, and considering the competition afforded by chairs made in the States of Mexico, Jalisco, Guerrero, and Nayarit. It is doubtful that the local pine forests can be built up sufficiently to support large-scale production of either chairs or *bateas*, although tules of the type used for chair bottoms can be cultivated along the lake margin, and the area could become self-sufficient again in the production of oils (*chia*, *chicalote*, linseed) and certain pigments.

Since the *chamaco* size chair constitutes about 75 percent of all chairs produced to date in Quiroga, it may be of interest to outline some of the factors involved in its production. A typical chair of this size has an over-all height of 44 to 46

cm., the seat is 23 to 25 cm. above the floor, and the seat has a front dimension of 25 to 30 cm., and a lateral dimension of 24 to 26 cm. Approximate average costs of labor and materials per dozen chairs are: \$2.56 for lumber and \$3.50 for labor in making the frames; \$2.00 for weaving the bottoms and \$1 for the tule; \$3.50 for labor and \$1.50 for materials in sizing, varnishing, painting, and decorating; which total \$9 for labor and \$5.06 for materials per dozen chairs. This provides a grand total of \$14.06, although various shops gave us estimates which ran from \$11.70 to \$16.40. A dozen chairs ready for packing sell for \$18; and the packing runs from \$3 to \$4.05 per dozen. Packing varies from expensive but durable wooden crates and boxes to cheaper but poor wrappings of mats (*petates*). The average gross profit is around \$4 a dozen, from which must be deducted the costs of storage space, power, and general overhead (including the time of the owners devoted to supervising, bookkeeping, sales, etc.). No figures were available on such costs. The outstanding fact is that the chair industry provides employment (full and part time) to 150 to 200 people (carpenters, seat weavers, painters, packers, truckers, etc.), and brings in \$8,800 (calculated on the basis of a minimum of 4,000 chairs of different sizes) or more each month. Of this money about \$5,600 is retained in Quiroga as wages and gross profits.

Although chairs and *bateas* constitute the chief items of woodwork in Quiroga, there are several others that should be mentioned. The classic decorated chests and trunks (*cajas*, *arcas*, *baules*, *petacas*) are no longer made, but two carpenters in one household make about six *petacas* a week (at \$20 each) which are somewhat like the earlier chests. However, the chests are not made in nested form (i. e., several chests of diminishing size each of which fits into the next larger chest, and each of which has a different lock and key); they have simple locks purchased at the stores; and the decoration is inferior to that on the old chests. One old *baul* (estimated by its owner as 70–100 years old) which we examined consisted of six "nested" chests, each of which was decorated on the top and three sides. The decorations were flowers, plants, birds, and monkeys in several colors on a black *maquea*. The chests were made of pieces of pine lumber fitted with wooden nails or pegs. Several of the chair shops also make

small tables adjusted to the smaller sizes of chairs, and a miscellany of furniture ranging from toy furniture sets up to a few full-size dining-room and living-room suites. The locally made wooden earring pendants have been mentioned, in addition to which a few masks are made; and spoons, ladles, and other woodwork from Paracho are decorated by some of the *maqueadoras* and *pintores* of Quiroga. One of the handicraft merchants recently abandoned the manufacture of chairs, and concentrated on turning a variety of wooden objects such as bowls, jars, chessmen, etc. The material used is locally cut madroño and *jaboncillo* wood.

WEAVING OF WOOLENS AND COTTONS

The weaving of cotton goods was a prehistoric occupation in Michoacán, and professional weavers are mentioned in the *Relación de Michoacán*. Unfortunately, we do not have a satisfactory list of the items woven by the Tarascans before the coming of the Spaniards. *Mantas* (blankets) appear on the lists of tributes paid by villages of the Pátzcuaro Basin so early that probably cotton was used instead of wool for the *mantas* made before sheep raising became well established in the area. No where is there any indication that Cocupao was ever noteworthy for its weaving, but apparently weaving of items for local consumption was present throughout the colonial period—as was true of most of the other Tarascan villages. Wool soon became the only fiber used for blankets, skirts, and most sashes, while cotton provided the material for shirts, blouses, trousers, dresses, and shawls (*rebozos*). Spanish influence not only substituted wool in large part for cotton, and introduced a number of new forms (trousers, dresses, shawls, etc.), but also brought about a gradual replacement of the native primitive "horizontal" looms with upright looms (*telares*) and of the crude spindle and whorl with the spinning wheel (*torno de hilar*). At present in Quiroga there is no spinning or weaving with the aboriginal techniques or instruments. In fact, the entire weaving craft from type of goods produced to the guild organization seems to be European. It is of interest that the weaving guild (*gremio de tejedores* or *obrajeros*), presumably the oldest craft guild in Spain, should be one of the three still extant in Quiroga. Due to the complete lack of local records we can only assume that the

weavers, along with the other guilds in the village, participated in the general decline that took place during the eighteenth century in Mexico; and after craft guilds were abolished or outlawed in 1861 the weaving guild lost all of the attributes of a craft guild and became simply a religious guild or *cofradía* which retained merely the name and membership from the craft corporation. Locally a weaver in wool is referred to as an *obrajero* and the room in his home in which is installed only one or two looms is called an *obraje*, despite the fact that less than 150 years ago only very large weaving establishments were termed *obrajes*. Formerly a small establishment, such as are all those in Quiroga, was termed a *trapiche*, but now throughout most of Mexico a *trapiche* is a small sugar mill and the associated plantation.

In 1945 there were 13 upright wooden looms, entirely of local manufacture, in 12 Quiroga homes. All of the *telares* were old; in some instances the original frame had been made by the grandfather of the present owner, although various parts had been replaced. Ten of the looms were commonly in operation. The usual equipment, in addition to the loom, included one to three spinning wheels (*tornos de hilar*), a reel (*malacate del torno* or *devanadera*), and one to three pairs of cards (*cardas*). There were 23 individuals who termed themselves *obrajeros*, as compared with 26 in the 1940 census. These *obrajeros* comprised 12 owners (*patrones*), 9 members of the family, and 2 journeymen workers (*obrajeros ambulantes*). No distinction was made among pickers, sorters, carders, spinners, dyers, weavers, fullers, etc., since usually all of the *obrajeros* participated in all of the stages of work. In some families women might assist with washing, carding, and spinning the wool, but the actual weaving was done only by males whose ages ranged from 14 to 58. The wool used was purchased from the ranchos of Quiroga and elsewhere within the general region. Prices (as of 1945) varied from \$4.00 to \$4.50 a kg. for dirty or unwashed wool (white, brown, and black), but the average price was \$4.00. Blue and red aniline dyes are purchased from stores in Quiroga and Morelia, although some of the customers insist on indigo being used for the blue. The leading manufacture is a blanket or *cobija* (the term *serape* or *sarape* is not commonly used by the weavers), usually woven in two parts which are sewed together in such fashion as to leave an

opening for the head. This *cobija* or serape serves as overcoat, jacket, muffler, saddle pad, blanket, etc. Formerly, we were told, the leading and almost only color combination was black decorated with red. Although black-and-red serapes still predominate, other combinations are present, such as black with blue, black or brown with white, black or brown with red and white, and even blue with white. The plaid serapes worn by some of the men are imported. The typical serapes are of dark colors and coarse weaves with simple pleasing designs in red. Two or three weavers make woolen yard cloth (*sabanillas*) and simple light blanket "coats" (*gabanes*). There are two sizes of serapes recognized: a *cobija grande* (which is predominant in the cool climate of the highlands) 2½ Spanish yards in length (about 2.09 meters), and a smaller *cobija común*. It takes one man about 3 weeks to elaborate a large serape, doing all of the work from washing the wool to weaving. Normally two or three individuals working together on the different operations will turn out a large serape in one week. Skill and rapidity vary individually, and the rates run from one-third to an entire serape per man per week. The finished product is sold by finished weight if the wool is provided by the weaver, and by work-weight if the prepared wool is provided by the customer. A large serape requires from 3 to 5 kg. of wool, according to the tightness of the weave, the average being 4.5 kg. The finished serape costs from \$10 to \$25 a kilogram, according to the skill and reputation of the weaver and whether the wool was supplied by the customer or elaborated by the weaver. The finished serape in 1945 cost the customer in Quiroga anywhere from \$45 to \$125, with a mean somewhere between \$50 and \$70. The net gain to the average weaver was about \$2.75 a day. The complete elaboration of a serape consists of: (a) Purchasing dirty wool, washing, drying, sorting, and carding; (b) preparing the yarn by spinning and dyeing; and (c) weaving the fabric. Unfortunately we took no notes as to the nature of fulling the fabric, if any. Probably fewer than 250 *cobijas grandes* or their equivalents are produced a year. This is not enough to supply local demand. The production of woolen cloth (in pieces 25 meters long and 20 *pulgadas*—46 to 50 cm.—wide) may amount to 30 or 40 pieces a year.

There are two cotton-weaving establishments,

which employ from four to nine individuals. In 1945 there were but three weavers (*tejedores*) and one spinner (*hilandera* or *tornera*) working. One shop with three looms had been converted in part into a chair factory, and only one person was employed in weaving. The other shop contained two cloth looms (*telares de cambaya*), one belt loom (*telar de faja*), and one shawl loom (*telar de rebozo*), as well as two spinning wheels and several reels. All this equipment was wooden and was made in Quiroga. Raw materials consisted of skeins of cotton yarn and dye materials purchased in Morelia and Quiroga. The operations performed in the shop were: (a) Dyeing the yarn or thread the appropriate colors (red, orange, black, blue, yellow, etc.) with aniline dyes, (b) drying the skeins in the sun on racks in front of the shop, (c) running the thread onto reels, (d) mounting the threads in the warping frame, and (e) weaving the fabrics. Most of the cloth woven was a fabric termed *cambaya*, and the weavers are known as *camballeros*. These terms are reminiscent of the Indian cotton fabrics which at one time were exported from the Cambay area north of Bombay, and the local *cambaya* might be called a coarse striped muslin much like the bengal and cambaye of India. The cloth is woven in pieces 25 meters by 55 cm. One weaver can turn out one piece or roll of *cambaya* a day, or 15 small rebozos, for which he receives \$2 in wages. Frequently the *camballero* will "rest" by shifting from one type of weaving to another, including belts or sashes. In Quiroga the weaving of rebozos and *fajas* is quite unimportant, and most of these articles are brought in from Paracho and other villages of the Tarascan Sierra.

Other types of weaving are practically nonexistent. There is a one-legged man who divides his time between being the town's only shoeblack (*bolero*) and weaving hats of palm fiber brought up from the *tierra caliente*. Also, there is one family of traveling salesmen (*comerciantes ambulantes*) who weave baskets and make a variety of toys while home from their selling trips. Although there is a large local demand for mats (*petates*), for many purposes—from use as sleeping mats to wrapping for chairs and furniture—all of the *petates* are purchased from weavers in Santa Fe, Tzintzuntzan, and other lake communities. The tules along the lake shore near Quiroga are on Santa Fe property, and they are harvested

periodically by the people of Santa Fe. Some fire fans of wheat straw are decorated by the painters of Quiroga, but these fans are made in the three western villages of the municipality. Practically all of the cordage and other manufactures of agave fiber are brought in from the states to the north. Hammocks are not used in Quiroga excepting for a few in some of the wealthier homes which are used for daytime relaxation.

FIREWORKS

The makers of fireworks or *coheteros* occupy a very important and honored position among the craftsmen of Quiroga. Ever since the introduction of Christianity fireworks of various types have been an indispensable part of religious festivals, and far more fireworks are used today in religious celebrations than in patriotic and other celebrations. For some years there have been but two *coheteros* in Quiroga, but these two (aided by members of their families) are able to meet the local demands. Although a variety of fireworks are made to order, the most important and most costly are the frameworks of cane and twine with attached firecrackers (*cohetes* or *bombas*). The most common shapes are towers (*castillos*) and large Catherine wheels (*ruedas grandes*). The implements used are simple, consisting of mortars, pestles, knives, and a set of shaping irons. Local canes and paper purchased in the stores provide the framework and the containers. The other materials are potassium nitrate, chlorate, sulfur, charcoal, and bitumen. The large jobs with elaborate frameworks are done on special contracts which may involve several hundred pesos. Should the fireworks "fizzle out" the maker may lose all of the contract money and even may be fined. The day by day work is the making of the individual *cohetes*. The leading *cohetero*, with the assistance of two sons, turns out about a gross and a half of firecrackers a day. These *cohetes* sell for \$6 a gross, which amounts to a net income of between \$3 and \$4 a day for the family. When not engaged in making fireworks they make blankets.

BLACKSMITHS AND TINSMITHS

There are four blacksmiths (*herrereros*) who work in two home smithies; and there are two tinsmiths (*hojalateros*) each with his own home shop. In the previous century there were a number of

smithies, and there was a street of blacksmiths, but the great reduction in the packing business (*arriería*) together with greater availability and cheapness of iron and steel goods manufactured elsewhere in Mexico, or imported from Europe and the United States, has greatly reduced the variety and number of items elaborated by the smiths of Quiroga. Although they can and will make almost anything from a machete or a plowpoint to an iron grill or a heavy chain, most of their work is confined to making small and simple items used by farmers, such as mattocks, axes, plowpoints, sickles, gads, shoes for equines, etc. The equipment is such as could be found in a rural smithy in the United States a couple of generations ago. Nearly all of the adzes, drawshaves, plane blades, locks and keys, bits, saws, hammers, and most of the other iron and steel items in common use come from Mexico City or Monterrey; pocket and belt knives are principally European; and most of the machetes come from Guerrero and Connecticut. Although there is a tradition that the original bells of the parish church were cast in Quiroga, the present bells came from outside of the State. Most of the protective and ornamental bars and grills (*rejas*) were purchased in Morelia, and probably were made in the State of Puebla or in Mexico City. Other than for the equipping of the pack trains there never was an ironworking tradition in Quiroga. However, only one of the Tarascan villages (San Felipe de los Herreros) ever had such a tradition, and even there the quantity and quality of the ironwork is low. Villa Escalante (Santa Clara de los Cobres) supplies the copperware in use in Quiroga. The two tinsmiths do not work consistently at their trade, and their production of candleholders, frames, trays, lanterns, etc., is quite small. They use both commercial tinsheet and the material in "tin cans." Quite definitely Quiroga is not much of a user of items of metal other than in the woodworking occupations and in some of the farming implements. Leather and cordage replace chains and nails, stone and wood are the common fence materials, items of stone, and wood and terra cotta dominate the kitchens, etc.

SKIN AND LEATHER WORKING

Although the curing of skins and the working of leather were *oficios* given in early colonial days to the neighboring village of Teremendo, there

has been leather working in Quiroga from the earliest times on record. At present there are 28 shoemakers and cobblers (*zapateros*), 14 tanners (*curtidores*), and 3 harness makers and saddlers (*talabarteros*). There are six tanyards (*tenerías*), four of which are in the homes of the proprietors, and all of which are in the western part of *cuarteles* I and II near springs and piped water. The equipment varies from tannery to tannery, but the essentials consist of a supply of water, several vats, a number of wooden horses or tanner's beams, an assortment of knives (fleshers, scrapers, curriers, trimmers), and smoothing irons (instead of rollers). More than three-fourths of the prime materials are oxhides fresh from the slaughterhouse which sell for an average of \$1.60 a kilogram. The average oxhide, moist and smeared with blood and dirt, weighs about 30 kg. and costs \$45 to \$50. Possibly sheepskins rank second, and these are purchased at from \$3.50 to \$5 apiece. A few horsehides are tanned, and also some skins of pigs, goats, and an occasional wild animal (deer, raccoon, fox, wildcat, etc.). Most of the tanners use vegetable tannins, principally *cascalote* (*Caesalpinia coriaria* (Jacq.) Willd.) from the *tierra caliente* at 80¢ a kilogram, and *timben* or *raicilla* (mentioned previously) at \$2 an *arroba*. A few tanners use potassium dichromate and other chromium compounds, which are expensive (\$20–\$27 a kilogram) but which reduce the tanning time by at least one-third. Other materials include lime, dyestuffs (black, yellow, and brown), and dog dung. The first operation is to wash and soak the hides in limewater, which loosens the hair and the scarfskin, plumps the true skin, and neutralizes the fats. Next, the hides are placed on the horses or beams and hair and scarfskin are scraped and shaved off the hair side and the fatty compounds and flesh are removed from the inside. Then the lime remaining in the hides is removed or neutralized by soaking the hides in water in which dog dung has been dissolved. Finally the hides are placed in the tanning solution, where they are left for about a month if vegetable tannins have been used. We cannot describe the dyeing process (which is done simultaneously with the tanning) because the hides in Quiroga are not commonly dyed, and we did not see the process. The principal uses of Quiroga leather are for sole leather, thongs, belts, and some uppers. Some of the tanners do their own splitting and currying,

but many of the tanned hides and skins are sold in that form to the *zapateros* and *talabarteros*. The entire *cueros* are sold at \$4.50 to \$4.80 a kilogram of tanned leather. It is claimed that a green hide of 30 kg. will yield 16 kg. of leather. This would amount to an income (after deducting for the cost of the green hide) of about \$28.80 per tanned hide, from which must be deducted the cost of water, tannins, lime, etc. We were unable to obtain satisfactory figures for these costs. The average tanner can complete 8 to 12 hides each month. We would hazard a net return for labor of about \$4 or \$5 a day. However, the total number of oxen slaughtered in the municipality each year is not sufficient to keep all of the tanners working at capacity, and there is relatively little purchase of hides from neighboring municipalities.

With the decline of *arriería* there has been a great decline in the number of *talabarteros*, and at present there are only three who claim this occupation. Actually, only one maintains a formal shop or *talabartería* in his home, and the other two do only occasional jobs where the leather is provided by the customer for some specific manufacture. Equipment consists of awls, knives, punches, sharpening steel, wedge, rule, compass, triangle, hammers, mallet, and wooden vise or form. Materials embrace leather of various weights and quality purchased in Quiroga and Morelia, thongs, *pita* (*Agave*) cordage, and buckles. Various types of belts and straps constitute the bulk of the present manufacture. Mending riding saddles, making men's belts which cost \$1 in materials and sell for \$2, and retailing a variety of leather goods constitute the business of the leading *talabartero*. The others make occasional sets of harness to order. The equipment for pack animals (*jato*) comprises cinches, martingales, back straps, blinkers, saddle or packing pads, crude packing trees, etc. The exact number of these items varies with the customer, his pocketbook, and his occupation. *Arrieros* who drive burros and mules on long trips over rough roads are the most exacting in their requirements. The set of harness (*aparejo*) used locally on burros can be made in 5 or 6 days, and costs the leather and *pita* involved plus \$3 a day wages. On some sets there is almost more agave fiber used than leather.

The 28 shoemakers, cobblers, and makers of leather sandals (*huaraches*) work in 16 shops, all

but 4 of which are in the homes of the proprietors. The number of workers, including the proprietor or *patrón*, varies from 1 to 4. There is very little shoemaking, and most of the work is repairing shoes and sandals. Several shops concentrate on making sandals and these are known as *huaracherías*. The equipment is very simple and is restricted to metal and wooden lasts and forms and hand tools such as awls, knives, and hammers. A few shoemakers have sewing machines. The majority of the shoes and probably a large part of the *huaraches* in Quiroga are brought in from Mexico City, Guanajuato, Jalisco, and other towns in Michoacán.

TAILORS AND DRESSMAKERS

There are eight tailors who work in five shops or *sastrerías* which are installed in the front rooms of the homes of the proprietors. They make a variety of clothing for males, repair clothing, and do cleaning (removal of spots) and pressing. When a suit, or overcoat, or some shirts are made, commonly the customer supplies the cloth, which may be purchased in Quiroga or Morelia, and probably was made in Guanajuato, Querétaro, the Distrito Federal, Puebla, or Veracruz. The basic equipment consists of hand and pedal sewing machines, irons heated with charcoal, and an assortment of shears, scissors, needles, and tape. Most of the articles of female dress (other than the rebozos and *fajas* worn by the poorer women, and the fine shawls or mantillas and stockings worn by a minority) are made in the home. In the town of Quiroga there are 107 hand and 87 pedal sewing machines, or about one sewing machine for every three households. In addition to skirts, blouses, dresses, and undergarments for the female members of the family, a large proportion of the work trousers, shirts, and underwear of the males are also made in the home. Women who do not own sewing machines commonly borrow or rent from their neighbors. Some housewives do occasional sewing for others. However, there were five professional dressmakers or *modistas*, two seamstresses, and an uncertain number of women and girls who would go out to others' homes to sew.

The above categories practically exhaust the list of cottage crafts. Although nearly all of the baking is done in home establishments, this and other forms of food elaboration have been grouped

together for discussion. Since Quiroga is nearly surrounded by important pottery-making communities (Santa Fe, Capula, and Tzintzuntzan) not a bit of pottery is made locally, although some of the pottery made in Santa Fe is decorated by Quiroga painters. The total picture of cottage crafts in Quiroga is somewhat inconsistent. Only in the wood industries (chairs, *bateas*, and turned objects) is there a constant surplus for export. A number of crafts exist which only partially supply the local needs (e. g., weaving, blacksmithing, and leatherworking). In a few fields there is still dependence on communities which have specialized in certain commodities since colonial times (e. g., metates and manos from San Nicolás, musical instruments and chocolate beaters from Paracho, etc.). However, the improvement of communications and the development of large and diversified industries in such cities as Mexico, León, Guadalajara, etc., have combined to bring about a general reduction in most cottage crafts. This trend probably will continue in Quiroga until there will be left practically no true cottage crafts. Making of wooden items for tourists will become more and more concentrated in central shops, while such crafts as weaving and leatherworking will disappear completely, shoemakers will be simply cobblers, tailors will be principally menders, cleaners, and pressers of clothes, and blacksmiths will do little more than shoe equines, etc.

FOOD PROCESSING

Other than the milling of wheat flour and the grinding of maize, the chief form of food processing is the baking of breadstuffs from wheat flour. There are 25 bakers or *panaderos*, including one *repostero* or maker of tarts, cookies, and other sweet confections. These 25 bakers work in 13 bakeries or *panaderías*, all but 2 of which are in the homes of the master bakers. There is 1 large bakery, 7 of middle size, and 5 small ones. Each bakery has 1 or 2 *hornos* or Spanish bake ovens, about 4 meters in diameter and 1.30 meter in height, which are located in the yard or patio. The dough is mixed in wooden bowls and a large wooden trough (*artesa* or *canoas*). Other equipment included poles and long spatulas or paddles (*hojas*), flour boards, baskets, and mantles. The regular bakeries made small crusty French rolls; smooth floured circular breads something like a large biscuit in appearance, roundish breads glazed and encrusted with white

and with brown sugar, and sweetened breads in a variety of forms which went by such fanciful names as *espinazos*, *gendarmes*, *conchas*, *cuernos*, etc. The materials used daily in the larger bakeries consisted of one 44-kg. sack of locally milled wheat flour, 3.5 kg. of lard, 10 kg. of white sugar, 5 kg. of *piloncillo* or brown sugar, 250 gm. of bicarbonate of soda, and 250 gm. of table salt. No eggs were used in the bakeries excepting in the one *repostería*. The smaller bakeries sold their products directly to customers, while the larger establishments hired boys and men to deliver their output to the stores in Quiroga and to the ranchos. For delivery the baked goods (colloquially known as *fruta del horno*; i. e., fruit of the oven) are placed in a large basket which is covered with a cloth and then is carried on the head. In 1945 practically all of the baked goods, whether plain rolls or sugared buns, sold for 5¢ to 10¢ apiece. We were unable to obtain figures on wages and other costs, nor could we find out the actual production of the different bakeries. Consequently we cannot evaluate the baking industry. It is certain, however, that the production and consumption of wheat breadstuffs is increasing in Quiroga. Although the *gremio de panaderos* is extinct as a craft guild, it is still organized for religious purposes. Furthermore, the bakers were sufficiently well organized along economic lines that in June of 1945 they carried out the first strike in the history of Quiroga. This 3-day strike (refusal to bake for the community) was in protest against the high price of sugar, and closely followed the first modern attempt at price control in Michoacán (the publication on June 11, 1945, by the State government, of a list of maximum prices for various commodities).

FLOUR MILLING

The single largest industrial establishment in Quiroga is in the hands of the Torres family. This establishment consists of the only wheat mill in the municipality, one of the two *molinos de nixtamal* in Quiroga, one of the three largest chair factories, and the local office for the electricity which is brought in from the Bartolinas plant near Tacámbaro. The wheat mill and the *molino de nixtamal* are the most important food-processing establishments in the northern part of the Pátzcuaro Basin. The wheat mill contains one Midget Marven mill of 4 pairs of cylinders (6 by 20 inches) with a capacity of 40 barrels (of 88 kg. each) every

24 hours; 1 cleaning machine and 2 machines for further cleaning and polishing the wheat kernels; 1 Great Western *banco* with 2 pairs of cylinders (6 by 16 inches); 1 Todd Improved *torno*; 1 mixer; 1 Mitchell blancher; 1 Jewel packer; and 1 Koerting motor with pulleys, belts, and other accessories. Although estimates of production are often made in barrels, all of the flour produced is sold in bags of 10 kg. and 44 kg. The bags are purchased from a company in Puebla, and carry the trademark of the local mill "El Luchador." The wheat milled is mainly from the municipalities of Quiroga and Tzintzuntzan, although some comes in from other municipalities. In 1944 and 1945 some wheat was imported from the United States. The mill in Quiroga has to compete with mills in Chapultepec, Pátzcuaro, Tacámbaro, Morelia, Villa Jiménez, and elsewhere in northern Michoacán. Nearly all of the wheat milled is the general type known locally as *trigo colorado*. The mill operates two 8-hour shifts a day, and produces about 50 sacks of 44 kg. or the equivalent of 25 barrels of flour a day. Approximately 12,000 sacks, or 528,000 kg. of flour, are milled each year, since the mill operates about 240 days each year (25 days a month for 9.5 months of the year). Apparently it takes from 120 to 130 kg. of wheat to make 44 kg. of flour. In 1945 the mill purchased local wheat for \$56.50 a *carga* of 161 kg., and imported wheat from the United States at \$62 a *carga*. The chief markets are in the municipality of Quiroga and in Morelia. However, wheat flour from the Santa Lucia mill in Morelia also is sold in Quiroga. In 1945 a 44-kg. sack of flour wholesaled in Quiroga for \$23; in 1944 the price was \$18 to \$20; and before the war the wholesale price was between \$10 and \$15. The local merchants retailed this flour at 55¢ to 60¢ a kg. for a gross profit of 2.7¢ to 7.7¢ per kg.

MOLINOS DE NIXTAMAL

The Torres establishment contains the leading *molino de nixtamal* which is powered by electricity and grinds about 750 kg. a day of dough or *masa*. The Fuentes *molino de nixtamal*, with two grinders, is powered by a 30-hp. engine (fueled by *gas pobre* produced from charcoal) and grinds about 400 kg. of *masa* a day. The combined production of 1,150 kilos of *masa* probably represents between 40 and 45 percent of the *masa* ground each day in Quiroga. The remainder is ground principally

on the metate since nearly every one who can afford it takes her *nixtamal* (prepared maize) to the mill, and those who cannot afford to pay the milling charge of 2¢ a kilo of *masa* usually cannot afford to purchase a handmill. There are very few handmills in Quiroga as compared with the ranchos where there are no *molinos de nixtamal* even for those who could afford to have their *nixtamal* ground. Those who cannot afford to pay the milling charges make a virtue of necessity and claim that tortillas made from *masa* ground in the mills have an inferior flavor to those prepared from *masa* ground on a metate. Some men even go so far as to claim that they can distinguish between tortillas prepared in their homes and tortillas made by other women. Possibly there is some truth to these claims. At any rate, in many communities where *molinos de nixtamal* exist, there are a number of families who could afford to patronize the mills but who do not do so. Furthermore, many young brides do not dare patronize the *molino* until they have proved to their husbands that they are adept with the metate and mano. However, there is less of this in Quiroga than in most Michoacán communities since the first *molino de nixtamal* (powered by a steam engine) was established in 1906. This was one of the first in Michoacán. The present Torres mill grew out of one that was established in 1909 (run by *gas pobre*). A few of the well-to-do families who like their tortillas but who do not like the *masa* produced by the mills hire women (*molenderas*) to come in daily and grind on metates. There are eight of such women in Quiroga who charge the equivalent of about 3.2¢ a kilo of *masa*.

The mills are termed *molinos de nixtamal* because they do not grind dry maize but a specially prepared form known as *nixtamal*. In the evening a woman will select as much dry shelled maize as is needed for the next day's tortillas. In a family of four or five individuals who eat no wheat bread this will amount to 3 to 8 liters. The kernels are rinsed and placed in a special *olla*, enough water is poured in to cover the maize, and lime is added. The amount of lime used varies with the individual. It is this lime, or rather the wood-ash lye which formerly was used, which gives rise to the name. In the Mexican language *nextli* is ash and the ash or

lye water in which the maize is placed is termed *nextle*. The Tarascan terminology is nearly the same and *nixtamal* becomes *apu*, from *apo* (ash). The *olla (nixcomil)* with the limewater and maize is placed on the fire where it remains from 15 minutes to ½ hour, being constantly watched and stirred so that the water does not boil. Boiling is thought to give an unpleasant taste. When testing shows that the shell or outer skin of the maize will come off easily, the *olla* is removed from the fire, enough hot water is added to completely cover the plumped or swollen maize, and it is allowed to stand overnight. The next morning the maize kernels are rinsed several times to remove most of the lime, and then the *nixtamal* is ready for grinding. It is commonly computed that 1 liter or 0.7 kg. of ordinary dry maize (neither recently harvested nor quite dry and attacked by arthropods) will produce 1.25 kilo of *masa* or *tzirere*. Even though the *masa* is run through the mill a second time most housewives give it a third grinding at home to remove all lumps. Then it is ready to be patted into tortillas (the Mexicano is *tlaxcal*, and the Tarascan is *curinda*) and cooked on the terra-cotta or metal sheet (*comal* or *erex*) which is placed over the fire. The diameter, thickness, and weight of the tortilla depend on the tastes and wealth of the family. One liter of dry maize or 1.25 kilo of *masa* will produce from 8 to 42 tortillas which weigh from 200 gm. down to 33.5 gm. each. For domestic use the tortillas commonly range from 5 to 8 inches in diameter and weigh between 34 and 42 gm. The professional tortilla makers (*tortilleras*) who sell tortillas at the cooked-food booths or *puestos* usually get 42 thin tortillas from a liter of maize, and these tortillas were selling at 3 for 5¢ in 1945. During most of 1945 maize sold for \$21 a *fanega* (*hectólitro* or 100 liters), 90¢ a *cuarterón* of 4 liters, and 22¢ to 23¢ a liter.

BUTCHERING

Next in importance after the breadstuff industries are the slaughtering of livestock and the selling of meats. As has been mentioned earlier, all oxen are slaughtered in the municipal *abasto* or *rastro* under strict fiscal inspection. The sanitary inspection required by law is restricted to the rejection of only the most obviously diseased

DRINKS AND CONFECTIONERY

cattle. Approximately 250 to 350 oxen, and 350 to 450 hogs are slaughtered annually. Practically no calves are killed, and the comparatively few sheep and goats consumed in Quiroga are slaughtered in the ranchos. There are eight slaughterers (*matanceros*, *matarifes*, *matachines*) who are hired to kill, skin, clean, and dismember the animals. Sometimes the man who raised the animal will pay all the *abasto* charges and the wages of the *matancero*, in which case he disposes of the hide to a *curtidor* and sells the meats to the butchers. More often one or more of the butchers will acquire title to the live animal and take care of all expenses of slaughter. A butchered ox normally yields a hide, head, four "quarters," two sides (the thorax is split down the backbone), tongue, heart, lungs, liver, and (if a male) penis which is converted into a whip or quirt. The stomach and occasionally part of the intestines are cleaned and converted into tripe (*menudo*, *tripa*). Normally no use is made of the blood and intestines. After the slaughtered animal has been dismembered and the parts have been washed superficially at the *abasto*, the larger pieces are impaled on hooks in a specially made saddletree on the back of a horse and are thus conveyed to the butcher shops. There are four butcher shops or *carnicerías*, one in each quarter of town, and there are four butchers (*carniceros*, *tablajeros*). Since animals are not slaughtered every day and meat is not always available the butchers hang out a small red flag whenever there is meat for sale. The meat moves rapidly so there is little attempt made to protect the meat either from flies or from heat. The science of butchering is practically nonexistent, and the butcher whacks off pieces at the request of the customer with little concern for the grain or for "cuts of meat" as they are known in the United States. Pure flesh and fat with no bones (*pulpa*) and meat cut from the loin or chine (*lomo*) sold in 1945 for \$2.50 a kilo. When we first did field work in Mexico some 20 years ago one could buy the best *pulpa* for 50¢ a kilo. The other miscellaneous meats (*cocido*) sold for \$2 a kilo in 1945. Pork sold for \$3 a kilo excepting for the rib and backbone meats (*espinazo*), which sold for \$1.80 a kilo. When mutton (*carnero*) was available it sold for \$2 a kilo. We did not see the killing and preparing of hogs and sheep, but from the pork that we ate it was evident that the technique for removing bristles was not very effective.

The next most important "food" industry is the preparing of drinks, ices, sweetmeats, and candies. The small-scale preparation of *pulque* has been discussed previously. Until some time between 1918 and 1924 the manufacture of rum and *mescal* was quite important. At present no alcoholic beverages are made locally excepting a little *pulque*. Rum and *mescal* are imported from Uruapan, the *tierra caliente* of Michoacán and Guerrero, and from Jalisco. Modern European type beer has become quite popular in recent years, and large quantities are imported (in bottles) from Mexico City, as well as from some of the other brewing centers in Guadalajara, Orizaba, Monterrey, etc. The former *mescal* production, although controlled by a resident of Quiroga, came chiefly from the Hacienda Sanabria between Tzintzuntzan and Pátzcuaro. During the latter part of the nineteenth century and up to the Madero Revolution Quiroga was famous within Michoacán for its *aguardiente* (rum) made from brown sugar *piloncillo* and from the *sobrón* or molasses residue left from the making of *piloncillo*. These raw materials were brought to Quiroga chiefly from the *tierra caliente* to the south. Quiroga developed the *aguardiente* industry because of the reputation of the waters of some of its springs. During much of the Porfirio Díaz period there were two factories in Quiroga proper (one in *cuartel* I, and one near the springs of La Tepóricua), one in Caríngaro, and one in Sanambo. Three of these factories have given rise to the local place name *La Fábrica*. At present there are two small plants for making and bottling carbonated flavored and sweetened drinks (*refrescos*, *aguas gaseosas*). The favored flavors are lemon, lime, orange, peach, and strawberry in approximately that order. There is a local Coca-Cola concession, and this drink has gained some currency in Quiroga as it has throughout Mexico during the last 15 or 20 years. There are several women who prepare hot drinks for public sale on street corners and in the plazas in the early morning and at night. The most popular of these drinks are thin sweetened and flavored gruels known as *atoles*, coffee, and chocolate. There are two shops for making ice cream, sherbets, and other frozen confections. These two *neverías* or *paleterías* are equipped with electric freezers. Their products

are sold in the shops, by streethawkers, and by men who visit the ranchos and other nearby communities. Instead of the ice cream cone the favorite product is the *paleta* which is a block of mediocre ice cream frozen around a stick. There is one large *fábrica de dulces* or sweetmeat shop, housed in a private home, which hires up to 17 workers. Its chief products are sweetened fruit pastes or *ates* and sweetened ground parched maize (*pinole*). Occasionally candied pumpkins, squashes, and sweetpotatoes are made in several homes and are sold to stores or are vended in the streets. Most of the candy consumed in Quiroga is hard sugar candy purchased in the stores. Chocolate candies are practically unknown. There is nothing in Quiroga like a soda fountain, confectionery store, or milk bar.

BUILDING TRADES

ADOBE MAKERS

The building trades in Quiroga comprise the adobe makers (*adoberos*), masons (*albañiles*), tile and brick makers (*tejeros* or *alfareros* as they are sometimes called improperly), and carpenters (*carpinteros*). As was mentioned previously, carpenters are relatively unimportant in a community where most of the structures are of adobe, tile, and stone. They may be called on for the doors, windows (if any), and the wooden framework of the roofs, but quite often all of these wooden elements are elaborated by noncarpenters. Of greatest importance are the *adoberos*, but the technique for making adobes is so simple that practically every man who erects a house can make his own adobes. In our census of 1945 there were only four men who termed themselves *adoberos*, to which should be added a variable number of the day laborers who are hired to make adobes when the occasion demands more adobes than the house builder can make himself or purchase. Incidentally, there are no house builders as such. Whenever a man wants to build a structure he either does all the work himself (aided by members of his family), or hires day laborers, adobe makers, masons, et al. Several details concerning adobes have been given previously in the discussion of Quiroga houses (pp. 48-49). As mentioned before, the adobes commonly are made in the *solar* where the house is to be erected. If high-quality adobes are wanted a master *adobero* is hired at \$3 or \$4

a day, and two or three day laborers at \$2.50 a day. A *maestro* and three *peones* can turn out 250 adobes a day if water and the straw binder are available at hand. When all materials are provided the adobes cost from \$40 to \$50 a thousand; but seasoned adobes packed into a house site have an over-all cost of \$70 to \$80 a thousand. The implements consist of open frames or forms (*adoberas*) of the proper sizes, shovels, mattocks, and a four-handled table or panel of wood (*burra de madera*) upon which the mud is carried from the mixing pit to the forms. Wheelbarrows are not used. The outside dimensions of the most commonly used *adobera* are described as three *cuartas* by one *cuarta* and a *sesma* by 12 cm. A *cuarta* is the span of the open hand from thumb to little finger, and a *sesma* is the width of a hand with the fingers held together.

MASONS

There are 28 masons and bricklayers who are divided into the grades of master mason (*albañil maestro*), "half-mason" (*medio albañil* or *media cuchara*), and worker (*peón*). There have been no stonecutters or *canteros* for years, and whenever a stonecutter is needed he must be brought in from Morelia. The bulk of the work consists of laying out the stone foundations for houses and in bricklaying. A strong religious guild of masons existed until 1910. This guild took care of the expenses of a religious festival on the 15th or 28th of May of each year, and commonly spent about \$100 for the masses, fireworks, music, etc. The guild was run by a directive committee consisting of a manager (*empresario*), secretary, and treasurer. In 1922 or 1923 the local parish priest founded an "Association of Catholic Workers," but a number of the constituent groups, including the masons, withdrew after a time because (so some of the masons informed us) the priest used the common funds or contributions to aid only his favorites. About 1942 the masons ceased to undertake the religious and other expenses of some day in May. During the latter period of highway building through Quiroga (1939-42), when buildings demolished to widen the highway were replaced with brick fronts, a syndicate of masons and bricklayers was formed to regulate such matters as wages, hours of labor, and who should be employed. It is largely due to the demand for workers in 1939-42 that there are so many *albañiles* in Quiroga at present. There

is not enough work to go around, and most of them engage in other part-time occupations such as chair making and farming. Current wages in 1945 were \$4 a day for a *maestro*, \$2.75 to \$3 for a *media cuchara*, and \$2.50 for a *peón*. Standard equipment includes a trowel (*cuchara*), hammer, plummet, level, square, rule, cord, chalk, brush, a container for mixing mortar (*mezclera*), ladder, and scaffolding (*andamios*).

TILE MAKERS

Since nearly all of the buildings are roofed with curved tiles, and because replacements are needed as well as tiles for new buildings, the making of tiles (*tejas*) is an important industry. There are five tile works (*tejería, tejera, tejar*), all of them in *cuartel II* in the northwestern sector of town where there is a combination of appropriate clays and ample water supply. All of the *tejerías* are small one- to three-man establishments excepting one which employs up to six professional *tejeros* and two *peones*. There are five master *tejeros*, three apprentices, and eight journeymen tile makers in Quiroga. If working on wages the apprentices earn \$1 a day, the journeymen \$1.50, and the master operators \$2 a day. However, they often work by the piece, which seems to figure out about the same as day wages. A *tejería* consists of the piece of ground out of which the clay or earth is dug, an open shed or roof to provide shade, a drying yard, and one or two ovens or kilns. The ovens (*hornos*) vary considerably in size, but most of them seem to have a content of from 900 to 1,200 tiles at one firing. The tools include shovels, picks, cudgel, two-man screen with handles, water cans or buckets, rasps, iron tile mold (*gradilla*), wooden forms (*burros de madera* or *moldes*) upon which to place the freshly made tile, a strickle (*rasero*), and tables. The first steps in making tile are to dig up the clay with pick and shovel, dry the clay clods in the sun, pulverize the clods with a cudgel, screen the earth to remove sticks and stones, and mix the clay with water and burro dung. The mixing is done in a pit by men who tread the mixture with bare feet. The mixed clay is applied by hand to the *gradilla*; excess mud is removed with the *rasero*. The shaped tile is smoothed by hands dipped in water, and then the tile is placed in the drying yard to dry for 2 to 4 days in the sun. When the tiles have dried sufficiently irregularities left by the mold are rasped

off, and the kiln is loaded with the tiles and pine wood (at about \$5 a charge). The firing takes one day and is normally done on Friday or Saturday. One unit of operators (one to three persons) usually turns out about 1,000 tiles and a variable number of other terra-cotta products in a week. It is evident that the tile-making industry accomplishes most of its work during the dry season, and the rest of the year the *tejeros* work sporadically at tile making and at other occupations. The 47-cm. tile (which sells for \$30 to \$35 a thousand) is the chief product, but other sizes are made occasionally. Usually several other terra-cotta goods are made and fired together with the tiles. The most important of these are square brick (*ladrillo*) 20×20 cm., square tile (*baldosa*) 25×25 cm., and a thin oblong brick or tile (*tabique*) 28×14×5 cm. There is some manufacture of eccentrically shaped pieces (*citarrillas*) for balustrades, small stoves or furnaces for the cooking hearths (*hornillas para fogones*), flowerpots, tubing, etc.

To complete the list of constructive trades we should mention the one "plumber" and two electricians in Quiroga. However, none of these has much to do with building construction or equipment. The "plumber" makes practically no installations, and his chief job is to look after the terra-cotta conduits and metal pipes which constitute the town's water-supply system. In the last few years there have been very few electrical installations, and when these are made they usually consist of running wire from the nearest post that carries a live wire to the house or building and carrying the wire on the surface of floor, wall, or ceiling to the point or points where outlets are desired. All of the outlets are for electric lights excepting in the few mills and shops which use electric power.

CANDLE AND SOAP MAKING

Among the minor manufactures only the making of candles and soap are worthy of mention. Candles have been of great importance ever since the coming of the Spaniards and Christianity. Although formerly the predominant source of illumination, along with *ocoté* torches, candles are now little used for domestic illumination, and the chief use is religious. The annual consumption of candles in the church and in the household shrines must be enormous, but we were unable to

obtain adequate figures. In addition to the local manufacture in two shops, a very large number are brought in from Santa Fe, and especially large or fine candles come from Morelia and elsewhere in the Republic. Candles of paraffin and of beeswax and paraffin are made in quarters attached to the stores of two Quiroga merchants. Candlemaking is a part-time occupation filled by several men and women, but no person describes himself as a candlemaker by profession. The beeswax (*cera*) is purchased chiefly from ranchos to the north—Icuácato, Sajo, and Tzintzamacato—where there are some families (in the two last-named ranchos) which raise only bees and have up to 400 hives. There is a slight production of wax in Quiroga and the nearby ranchos. The beeswax is purchased in cakes or "cheeses" which vary from gray to blackish in color although yellow is the most common color. The color of the wax depends on the nature of the bee pasture. Unbleached wax cost \$6.25 to \$6.50 a kilo in 1945. Candles are made of both bleached and unbleached wax. The bleaching process consists of melting the beeswax, pouring it onto shallow containers where thin sheets or shells are formed, and exposing the sheets to the sun for a day or longer if necessary to obtain the desired whiteness. Although some candles of pure beeswax are made, they are more expensive than those of paraffin. Probably a majority of the candles made are of pure paraffin, and next would come candles of mixed paraffin and beeswax. We were unable to find out what proportions were used. Paraffin is purchased from local retail merchants at \$2.50 a kilo, as are the cotton wicks or *mechas*. Most of the candles made locally are for domestic illumination. These candles weigh 50 gm. and sell for 20¢. In one shop the slow dip (many successive dips) method is used, and in the other shop the rapid immersion method is used. There is no molding of candles. Probably not more than 300 kilos of candles are made a year in Quiroga.

A poor semiliquid soap known as *lejía* is commonly made in the patios of four Quiroga stores, and sporadically in other stores. Enough is made to supply the local demand for this soap, but all other soaps are imported. The *lejía* is commonly used for the first soaping of clothes. The frequency of manufacture seems to depend upon the rate at which each merchant accumulates tallow and crackling scraps by trade and purchase.

The local tallow (*sebo*) costs \$1.80 a kilo; the cost of imported American caustic soda (*sosa*) was not ascertained. The fats (50 parts by weight), alkalis (15 parts), and water (200 parts) are placed in a cauldron and boiled, then the saponaceous mixture is put into kerosene cans which hold about 18 kilos each. The semisolidified grayish mixture with various impurities is ladled or scooped out of the cans and retails at 30¢ a kilo. The chief producer makes about 720 kilos of *lejía* a month. Formerly bar soap was made in Quiroga, but now it is brought in from Morelia, Toluca, Guadalajara, Gómez Palacio, etc. Also formerly there were establishments which expressed oil from local linseed and *chicalote* seed, and there was a little manufacture of castor oil.

MISCELLANEOUS SERVICES

There is a large amorphous "labor pool" comprising 145 individuals without special skills who term themselves manual or day laborers. These persons go by such names as *jornaleros*, *trabajadores*, *labradores*, *braceros*, and *peones*. The majority (122) earn most of their income from farm labor and have been listed already under agriculture. However, these agricultural workers turn to many other forms of employment when farm work is not available. Such individuals, together with the 28 nonspecialized *jornaleros*, may be found cutting firewood, carrying water, making adobes, and tile, performing simple tasks in the chair factories and the mills, doing road work, etc. They have not been included in the numbers given for the various trades and occupations since they have no specialized skills and neither consider themselves nor are considered to be anything other than day laborers. Out of their numbers come the individuals who may act as male servants or men-of-all-work (*mozos*) in some of the stores and homes. However the regular occupation of male servant does not exist in Quiroga. It is somewhat different with the women. There have been mentioned already the women who go to homes to grind *nixtamal* and to sew. In addition, there are 31 women whose occupation is house servant (*criada*, *sirvienta*), of which number about half live in the homes in which they work. These women may be used for anything from house cleaning and washing clothes to grinding *nixtamal* and cooking. Since a number of these women are employed in the hotels and

restaurants, it is evident that very few Quiroga families can afford the luxury of domestic help. Actually there are 21 households which employ *criadas*, and a number of these servants are young girls less than 15 years old. Only four women gave their occupation as washerwoman (*lavandera*). Possibly this number is correct for those whose only income is from washing clothes, but there are a number of housewives who occasionally "take in washing." As there is no public laundry or laundry-place in Quiroga most of the women do the family wash themselves and at some nearby spring or stream. Only a few families possess tubs and washboards. If the washing is done by a *lavandera*, the normal charge is \$1 for a day's work plus the cost of the soap.

We have already mentioned the one bootblack (a cripple or *cojo*) in Quiroga who divides his time between shining shoes and boots and making palm-fiber hats. There are but four professional watercarriers (*aguadores*) in Quiroga, although many others carry water for hire on occasion. However, the bulk of the water consumed in the homes of Quiroga is carried in water jars or *ollas* by women and girls from the nearest public fountain or faucet. The *aguadores* employ a *maroma*, which consists of two kerosene cans (*latas* or *botes*) suspended by cord from each end of a pole which is balanced over one or both shoulders. The water is carried at 5¢ a *bote* or 10¢ a trip. There are no beauty parlors (*salones de belleza*) for the women of Quiroga, but for the men there are 8 barber shops (*peluquerías*) attended by 12 barbers. Actually only 4 of the shops are full-fledged barber shops with mirrors and barber chairs (slightly antiquated), and the others are little more than a box or kitchen chair in the front room or yard of some house. Many of the barbers combine barbering with other professions such as shoe mending, tailoring, and farming, and but 5 or 6 are strictly barbers.

PROFESSIONS

Under this heading we have lumped a somewhat incongruous group of occupations ranging from beggar to physician. In 1945 there were but two professional beggars (*limosneras*) in Quiroga, and other than these two poor old women we saw no beggars or begging. This speaks very highly for the industry and self-respect of the people of the area. The two *limosneras* had no relatives and

were too old to earn a living in any other fashion. There were two photograph shops (*fotografías*) and two *fotógrafos* who earned most of their living in other pursuits—one as a carpenter and school teacher and the other as a tailor. There were two drug stores (*boticas*), one kept by a physician and his wife, and the other by a *boticaria* who apparently had a license or degree in pharmacy. The physician's shop carried a small assortment of the medicines that were most in demand or which he most commonly prescribed, and the other shop had a larger array of patented medicines and the materials for some simple compounds. The more common types of medicines were laxatives and purgatives, "painkillers," and a number of specific medicines for diseases of the digestive tract. There is but one permanent physician (with degree from the Military Medical School in Mexico City) who first came to Quiroga in 1939–41 as chief of the local *ejidal* medical service, and who returned in 1944 to take up private practice. In addition, during the past few years there has been one or another physician assigned to Quiroga in connection with the Social Medical Service (*Servicio Médico Social*). Two women (including the physician's wife) term themselves midwives (*parteras*), but several other women also serve as midwives on occasion. One man and one woman (both quite old) were well known as herb doctors (*curanderos*), and we were told that there were two or three others in Quiroga.

The church is represented by the parish priest (*cura, párroco*), appointed by the Archbishop of Morelia, and the sacristan. However, there is a religious school with six women teachers who almost certainly are nuns, although they do not wear a special garb other than severe, black clothing. In the two federal schools there are nine teachers—two male directors or principals, five female teachers, one male teacher of music (*maestro* or *profesor de música*), and one male instructor in woodworking (*maestro de carpintería*).

HOTELS AND RESTAURANTS

The term hotel (recently introduced into the Spanish language) implies a certain magnitude and a completeness of service which do not exist in Quiroga. However there is one so-called hotel, the Hotel Central in the Portal Matamoros fronting onto the Plaza Principal, which occupies part of the largest private structure in Quiroga. This

was formerly known as the Hotel Vasco de Quiroga, and it has existed as a hotel for more than 40 years. However, it has but six rooms and is not much patronized. The largest rooming house is the Posada Escobedo, formerly the home of one of the wealthiest men in Quiroga, which has 21 rooms. This *posada* is well situated a few doors down Juárez from the intersection of the Pátzcuaro and Guadalajara highways and within sight of the stopping places of all the busses. The front of the ground floor is occupied by a restaurant, a butcher shop, a shoe-repair shop, the *zagún* or entrance to the *posada*, and a small store. All of the rooms that are rented are on the first floor (second floor in our terminology) which is reached by one narrow stairway. The central or inner patio, with its fountain and modeled frogs, and its shrubs and potted plants, was once one of the finest in Quiroga, but it seems to have been neglected in recent years. This *posada* was opened for business in 1940 as a result of the entry of the improved highway in 1939. The associated restaurant or *fonda* (which is nameless) is run independently of the *posada*. Here, in one small room with one large and two small tables, Doña Julia Rivera and her niece Chucha (aided by ever-merry hunchbacked little Plácida) serve the best meals in Quiroga. Doña Julia opened this *fonda* in 1941. A few doors down Calle Nacional from its intersection with Zaragoza is a nameless "Restaurant y Café," established in 1939, which is the oldest formal eating place in Quiroga and which does the most business thanks to its location where the busses from Tacámbaro and Pátzcuaro to Morelia and Mexico City make their stops. A block and a half down Zaragoza is a four-room *casa de huéspedes* (lodging house) kept by Doña Josefina Domínguez. Although the 1944 commercial census of Quiroga states that this house was opened in 1943 we know this to be an error, since we stayed here in 1939, at which time we discovered that Doña Josefina was a niece of the great Mexican anthropologist Nicolás León who was born in Quiroga. The most recent of the formal lodging and eating places (opened 1943) is the Restaurant Atzimba and associated *casa de huéspedes* on the corner of Zaragoza and Reforma. The above-mentioned places cater to the transient stranger and the wealthier visitor. People from the ranchos and nearby *pueblos* and *arrieros* in passage stay in the *mesones* (inns), of

which there are four. In the nineteenth century, when *arriería* was important, there were several fairly good *mesones* (such as La Libertad and La Providencia) which provided both sleeping space and food for man and beast, but now these places are little more than stables where stalls (*macheros*) or floor space (*piso*) are available for animals at 5¢ to 10¢ each per night, and wheat hay or straw is available at 10¢ per kg. The owner of the animals commonly sleeps here also, but he gets his meals at *puestos* on the streets and at stalls in the market plaza. In such cities as Morelia and Pátzcuaro there are still places known as *posadas* and *mesones* which provide both bed and board for travelers, but most of them have ceased to provide for animals. Such places in towns were stops for the stagecoaches, which began to leave the picture when the railroads entered in the 1880's. The equivalent of a *mesón* in the country was known as a *venta*, and such a place formerly existed some 10 miles east of Quiroga in the present community of El Correo. In the market plaza (Plaza de los Mártires) by the church there are four semipermanent food stalls with roofs, hearths, deal tables and benches, where meals are served on market and feast days, and morning, noon, and evening on most other days. In the morning and evening several women set up tables on the south side of the Plaza Principal and serve hot drinks (coffee, *atoles*, chocolate), beans, and a variety of meat and fish dishes. On the adjacent corner, near the principal bus stop, there is a *puesto* for the sale of roasted and boiled meats—chiefly pork, and occasionally mutton, goat, beef, chicken, and turkey. There are perhaps 10 women (*fonderas*) who commonly prepare and sell meals in this fashion, or who specialize in some one dish; e. g., *atoleras* who sell *atoles*, *pozoleras* who sell *pozole*, etc. Wheat breads are usually retailed by the women who sell meals, but tortillas must be purchased separately from a *tortillera* one or more of whom associate themselves with each dispenser of meals. There are at least a dozen women who prepare and sell tortillas in this fashion, although our census yielded only five. The explanation of this discrepancy is that commonly no occupation is given for a woman unless she is the head of the house. The 1940 census provides a good example of this sort of thing since practically all of the women had their occupation listed as household

chores (*quehaceres*) unless they were heads of family or the main source of support. Consequently no *maquedoras* of *bateas*, or *entuladoras* of chairs were listed, and a considerable number of the other gainfully employed women were listed merely as housewives. Another reason for the reported paucity of *tortilleras* is that a number of them constitute the nearest approach to prostitutes to be found in Quiroga.

PUBLIC EMPLOYEES

The term employee or *empleado* is restricted to "white-collar" workers (as opposed to manual laborers) and comprises most of the salaried holders of public office and clerks in the stores. We have extended the term to embrace all governmental workers. The commercial clerks are mentioned later. Federal employees or office holders include the Federal stamp agent, who is also a merchant; the postmaster, 1 mail carrier, and 1 to 2 clerks; the teachers in the two Federal schools who have numbered from 8 to 10 in recent years; and the physician of the Servicio Médico Social whenever he is in residence. The State employees comprise the tax collector and 1 to 3 clerks and collectors; the watchman or *velador* of the highway shack and equipment on the outskirts of town; and the operator of the telephone station who also acts as secretary of the municipal civil register. There are 12 to 16 other individuals who commonly draw salaries or wages from municipal funds. These include the president, syndic, secretary, treasurer, and sometimes a collector, inspector of the slaughterhouse, secretary of the local court, 2 to 5 policemen, streetcleaner and carter, water-supply maintenance man, town gardener, and mechanic who periodically oils and checks the town clock.

COMMERCE

Quiroga carries on much more commerce than its population would justify. This is because it is on the main highway west from Mexico City to Guadalajara, with a branch southward to Pátzcuaro and Tacámbaro; and many busses and most tourists stop here to purchase food, drinks, "regional curiosities," etc. It is also the principal market town for the people of the entire municipality, and a number of people come to Quiroga from communities outside of the municipality (such as Teremendo, El Tigre, Cuenembo, and

Tzintzuntzan) to purchase as well as to sell commodities. Furthermore, since ancient times Cocupao-Quiroga has been the most important community on the route between Pátzcuaro and Tzintzuntzan to the south and Chucándiro and other communities of the Lake Cuitzeo region to the north. During the nineteenth and eighteenth centuries, and probably earlier, packers (*arrieros*) and traveling merchants (*comerciantes ambulantes*) of Quiroga covered the region from San Luis Potosí and Guanajuato in the north to the *tierra caliente* and Pacific coastlands of Michoacán and Guerrero in the south, and Quiroga was an emporium for the exchange of goods between the plateau and the lowlands. At the height of its commercial importance, apparently from the 1840's into the 1880's, the market territory of Quiroga embraced all of the northern portion of the Pátzcuaro Basin and extended outward to include such communities as Lagunillas, Acuitzio, Coapan, and Chapultepec to the south and east, Tiristarán, Copándaro, Chucándaro, Urundaneo Teremendo, Tecacho, Huaniqueo, Puruándiro Coeneo, Comanja, Naranja, Zacapu, and Tiríndaro to the north and west, and along the lake shores to Tzintzuntzan and Erongarícuaro. The first reduction in Quiroga's commercial importance was accomplished between about 1886 and 1914 by the entry of railroads and by the accompanying development of commercial centers in many of the above-mentioned places. The long period of military, political, social and economic unrest from 1910 to 1928 reduced Quiroga to its lowest point in population and commerce since the colonial period. Its packing or transport business (*arriería*) was reduced to practically nothing, most of the manufacturing enterprises were abandoned (rum, vegetable oils, bar soap, etc.), and the local stores catered only to the population of the immediate area. With the improvement of the social-political situation and the establishment of the improved highway between Mexico City and Guadalajara, Quiroga began to recoup some of her losses. This has been most marked since 1937-41, in which years the oiling of the highways was completed, passenger and freight services by bus and truck were inaugurated, tourist trade and commerce in regional handicrafts burgeoned, etc. At present Quiroga is probably the most active town commercially, for its population, in Michoacán.

The exact number of merchants and of retail stores cannot be stated because the term *comerciante* or merchant includes traveling merchants or peddlers, streethawkers, keepers of plaza and sidewalk booths and displays, etc. Furthermore, many homes maintain a counter and a few shelves in the front room which may be stocked with only a few pesos worth of cheap commodities such as cigarettes, bread, bottled soft drinks, firewood and candles, but such *tendajones* are considered as full-fledged commercial enterprises, and the operators or owners are considered to be merchants. In addition, a number of the handicrafters or cottage craftsmen retail some or all of their products in their homes, and such places are often listed as stores or sales places (*ventas* or *expendios*) although the owners are not considered to be merchants. Also, there are several wholesalers who retail on occasion, as in the case of dealers in seeds and regional handicrafts.

FOOD AND OTHER STORES

The most important type of store is the *tienda de abarrotes* which is essentially a grocery store. The largest of these commonly sell all types of foodstuffs locally consumed excepting fresh meats, vegetables, and fruits. A normal stock consists of maize, beans, *habas*, rice, lard, dried meat, sugar (white granulated and brown sugar in blocks), salt, spices and flavorings, coffee, chocolate, wheat pastes for soup (macaroni, spaghetti, etc.), wheat flour, white wheat breads, crackers and cookies, some tinned foods, hard candies, chewing gum, bottled soft drinks, bottled beer, and eggs. Among nonfoodstuffs the typical *tienda de abarrotes* carries bar soap and *lejía*, candles, kerosene, cigarettes, matches, and possibly firewood and charcoal. Of the above-named items all or most of the maize, beans, *habas*, wheat flour, bread, soft drinks, eggs, *lejía*, firewood, and charcoal are produced locally. Much of the rice, sugar, dried meat, and coffee is obtained from the southern part of Michoacán. The remaining items come from many parts of Mexico and usually are obtained from wholesalers in Morelia and Pátzcuaro. Foodstuffs processed outside of Mexico are practically nonexistent in the Quiroga stores.

In 1945 there were 23 *tiendas de abarrotes* in Quiroga kept by 42 *comerciantes* (including owners, spouses, and older sons). These grocery stores

grade on one side into the 8 *tiendas de miscelánea* (average to large grocery stores which also carry goods not associated with grocery stores), and some 24 *tendajones* which are small stores with a restricted assortment of goods either of the *abarrotes* or the *miscelánea* type. Among items carried in the *miscelánea* stores are metal buckets, washbasins, chamber pots, cordage, "straw" hats, thread and yarn, dyestuffs, pigments, paints, linseed oil, plowpoints (*rejas*), cheap table service, brooms, knives, scissors, needles, pins, machetes, writing paper, ink, etc. The larger stores are concentrated in the central blocks, but *tendajones* are scattered over the entire town. There are a total of 55 of the above-mentioned *tiendas* and *tendajones* which handle groceries and other goods. There are several ways of evaluating their importance. In the commercial census of 1944 there were 26 establishments which had an investment of \$500 or more; and there were 21 stores which averaged daily sales (November of 1943 and November of 1944) from \$8 up to \$30. A more accurate evaluation can be obtained from the distribution (in May and June of 1945) of the 100 sacks of sugar allotted to the municipality of Quiroga by the national regulatory corporation known as Distribuidora y Reguladora, S. A. de C. V. Twenty-eight sacks went to bakers, candy and ice-cream makers, and bottlers of soft drinks; 9 sacks went to the 14 merchants in the three western pueblos; and 63 sacks were distributed among 38 merchants in Quiroga. One merchant received 6 sacks, 6 merchants received 4 sacks, 1 received 3½ sacks, and 7 other merchants were allotted from 1½ to 3 sacks. In summary: there were 8 "large" stores, 27 in the intermediate bracket, and 20 small establishments. Of the 35 larger stores, all but 4 are located on the Plaza Principal and the 4 axial streets. Of the 55 stores under discussion, all but 5 were opened for business (in present location and under the present management) since 1937; only 1 dates from before the revolution; and more than half were opened in the period 1941-44.

Specialized stores are not numerous. The four butchershops, one *talabartería*, two *paleterías*, and two drug stores have been mentioned previously. Some of the bakeries have associated *ventas de pan*; several of the tanners have *expendios de suela* (sole leather); a number of the *zapaterías* and *huaracherías* keep stocks of shoes and sandals for sale;

and a number of the other craftsmen (e. g., blacksmiths, tinsmiths, weavers, and carpenters) have a supply of their products for immediate sale in addition to making items on order. There are several wholesale-retail merchants who specialize in poultry and eggs (two), seeds (three), lumber (one), charcoal (one), chile peppers (one), onions (one), etc. Also, there are numerous streethawkers, local peddlers, small merchants who display their goods on the sidewalks and in the arcades, and home-stores which specialize in but one commodity. Among such merchants are three who sell nothing but lime for making *nixtamal*, five who have fruit *puestos*, three who vend sole leather, three who sell shoes and *huaraches*, one who sells serapes, one who sells rebozos, one who sells cotton cloth and rebozos, several who handle firewood and charcoal, etc.

There are five *cajones de ropa* (cloth and clothing stores) which specialize in "yard goods" (principally cottons and woolens, some silks, and a little linen). However, they also handle overalls, trousers, shirts, dresses, underwear, hosiery, ribbons, and other items of clothing. In the Portal Hidalgo is located the only *jarciería y sombrerería* which handles a variety of items made from agave, grass, and palm fibers, such as carrying bags (*morales*), cordage, hats, baskets, etc. On the corner of Portal Matamoros and Calle Benito Juárez is a solitary hand-operated gasoline pump and in the associated store is an air compressor and lubricating oil in sealed tins. There is no garage or automobile-parts store in Quiroga, although there are two "general mechanics," and a *taller mecánico* was being installed at the time of our departure. One merchant maintains a radio agency.

Although there have been small "curiosity shops" or *expedios de curiosidades regionales* for a number of years, it is only since 1939 that large and well-stocked stores have come into being. There are now five fairly large and well-stocked stores which handle not only locally made painted *bateas*, decorated chairs, objects of turned wood, and miscellaneous pieces of furniture, but also pottery from Santa Fe and other nearby communities, woodwork from Paracho, and other products of the arts and crafts of northern and central Michoacán. Three of these stores (Villanueva, Fuentes, and Villicaña) are located consecutively in the first block of *cuartel IV* along the

Calle Nacional between the Calle Benito Juárez and the Plaza de los Mártires; a fourth store (Chávez-Anita) is across the street on the opposite side of Calle Nacional; and the fifth and most recent (Villegas) is two blocks down Benito Juárez at the corner of Galeana-Berriozabal. All five stores started as *expedios de bateas y loza* (sales places for painted trays and pottery). The first three, which are the largest, have associated shops which provide such items as turned wood (Villanueva), and chairs (Fuentes and Villicaña). The chair shops are run by brothers of the owners of the curiosity stores. In addition to the 5 large establishments, there are 2 *expedios de bateas* in the Plaza de los Mártires, and several of the restaurants and other stores display small stocks of *bateas*, masks, pottery, etc. Furthermore, there are about 20 merchants who specialize in purchasing *bateas*, chairs, and pottery for sale in other parts of Mexico. These operators vary in scale from traveling merchants who carry their entire capital on their backs to a few who deal in truckloads or even in carloads.

AMUSEMENT ENTERPRISES

There are but a few enterprises devoted to amusement and recreation. Probably in first place would come the saloons or *cantinas*, of which there are four, one in each of the *cuarteles*. However, two of the *cantinas* are merely grocery stores which handle distilled drinks and sell liquors by the glass, and the other two are not elaborate although they are equipped with "juke boxes." There are six "juke boxes" (*sinfonolas, radiolas, ruidolas*) altogether in Quiroga—two in *cuartel IV* and four in *cuartel I*, four of which are installed in grocery or general stores. There are two poolhalls (*salones de billar*), both in the first block of *cuartel II*. One has four tables, and the other has three. About 1941 a cinema was opened in Quiroga which lasted until September of 1944. This was reopened in the Salón Tere on Ramón Corona, under new management, in June of 1945. It commonly has two shows on Wednesday, two on Saturday, and three on Sunday. Perhaps in this paragraph should be mentioned the one public bathhouse (*casa de baños*) on the western outskirts of town, which has a tank or pool and five stalls with showers. In addition, there are two or three private homes with hot and cold water showers where friends and properly intro-

duced persons may obtain bathing facilities—for a consideration. All other amusements, such as *jaripeos*, cockfights, traveling circuses and carnivals, horseraces, soccer and basketball games, dances, etc., are sporadic.

TRAVELING MERCHANTS

Although much reduced since the revolution, there is still a considerable group of traveling merchants or *comerciantes ambulantes*. This term is used for any merchant who has no fixed place of business (*puesto, despacho, expendio, venta, tendajón, tienda*, etc.), but hawks through the streets, visits the ranchos and adjacent pueblos, or makes long trips into other states. The term does not include the merchants, no matter how small their supply of goods, who occupy space daily or from time to time in the plaza, on the sidewalks, or in the arcades. The local street hawkers and peddlers (as contrasted with those merchants who travel long distances) sell such items as lime, ice cream (*paletas*), candies, soft drinks, and bread. Quite often such persons are known by their specialties; e. g., a *calero ambulante* (traveling salesman of lime), *dulcero ambulante* (candy peddler), etc. Such merchants are probably as numerous as ever. The reduction has been in the merchants who traveled outside of the state and often would be absent from Quiroga for several months. At present there are fewer than 20 of such *comerciantes ambulantes* or *huacaleros* as they are sometimes called because they often carry their goods in a large crate or *huacal* on their backs. The old-fashioned *huacalero* who went everywhere on foot is practically extinct. Although these merchants still cover considerable distances on foot, they are quite apt to take advantage of cheap-fare second- or third-class busses going in their general direction of destination. Among the goods packed out of the Quiroga area are pottery, *bateas*, serapes, and peaches. Frequently these merchants go by bus to the large manufacturing towns to the north (such as León, San Luis Potosí, and Querétaro) where they invest in textiles, leather goods, toys, cutlery, etc. Then they return by bus to Quiroga, or Pátzcuaro, or Tacámbaro, and then proceed on foot or with a burro or two down into the *tierra caliente* of the Balsas Basin and on to the Pacific coast. Before they return to Quiroga they may sell out their original load, restock with products of the areas which they traverse, sell

these goods, and repeat the procedure several times. The return load from the coast and the Balsas Basin may include such items as salt, machetes, cheese, dried meat, palm fiber, coconuts, pineapples, etc. Although most of this traffic follows the ancient trade routes from the plateau areas of Guanajuato and Michoacán to the coasts of Colima, Michoacán, and Guerrero (which were all within the prehistoric Tarascan domain, and which constituted the province of Michoacán during most of the colonial period), there is some commerce as far as Tabasco and Chiapas to the southeast. However, with the extension and improvement of rail and bus transportation from the plateau to the *tierra caliente* there has come an alteration of routes in detail and an over-all reduction of trade through the medium of the *comerciantes ambulantes*. Most of the *viajeros* or "long-travelers" are old men and women (more than 40, and with a mean of perhaps 60 or 65 years), and their children are taking to other occupations. The principal distinction between such *comerciantes ambulantes* and the old-time *arrieros* (see Transportation, pp. 197-198) seems to be that *arrieros* always used pack animals.

MARKETS

Although there are three plazas in Quiroga, at present only the Plaza de los Mártires between the Calle Nacional and the parish church is used as a market. We were unable to determine if the Plaza Vieja or the Plaza Principal was used for this purpose before the Plaza de los Mártires was inaugurated in the 1860's. The local market day (*día del mercado, día de plaza, día de tianguis*) is on Sunday. Since Cocupao-Quiroga never has been famed for its market, we do not know when it was established, but probably the market on Sunday dates back to the early Franciscan period or the regime of Bishop Vasco de Quiroga when most of the Tarascan villages were given their occupations and were assigned their market days. Apparently every community large enough to support a resident priest had some sort of weekly market. The size and importance of the market were proportional to the position of the community in the political-ecclesiastic hierarchy. Pátzcuaro, from about 1540 to the present, has had the most important market in the Pátzcuaro Lake Basin. The main market day in Pátzcuaro is on Friday, although there are minor markets on Sunday and

Tuesday. In almost all of the other towns of Michoacán the main market day is on Sunday. By the eighteenth century Cocupao-Quiroga had acquired political superiority to Santa Fe, San Jerónimo, and San Andrés, and probably from that time onward Quiroga had more than merely a local market. Its location on a crossroads and the presence of mestizo and white merchants also insured a greater quantity and variety of goods than was true for the markets of most pueblos. From about the 1840's until the Madero Revolution the Quiroga market attracted people from a much larger area than at present. Then the chaos of the revolution and the railroad from Pénjamo through Zacapu to Ajuno (built 1910-14) conspired to reduce Quiroga's market area to about its present size. The nuclear market area is the present municipality of Quiroga and that portion of the municipality of Tzintzuntzan which was a part of Quiroga until 1930. However, Tzintzuntzan belongs to the market areas of both Quiroga and Pátzcuaro. On the east Quiroga draws a few people weekly from such communities as El Correo, Iratzio, and Capula, but the majority go to Morelia, in which municipality they are situated. Formerly the market area extended westward and northwestward to Zacapu, Coeneo, and Huaniqueo, but the coming of the railroad to Zacapu and of highways and bus lines to the other towns has caused the development of strong commercial and market centers in those communities. However, to the north of the Pátzcuaro Basin and extending nearly to Lake Cuitzeo, is a region which formerly was crossed by the main highway between Morelia and Zamora, but which now belongs in large part to the Quiroga area. Among the settlements outside of the Pátzcuaro Lake Basin which consistently send people to the Quiroga market are (from west to east) Asajo, Comanja, Matujeo, Sipiajo, Teremendo, Tzintzimacato, Tirstarán, and Chucándiro.

The market plaza is roughly 65 meters by 45 meters in dimensions, and nearly all of the surface has been paved with cobblestones. Along the parish house and the church, which constitute the eastern side of the plaza, are 11 privet trees, and distributed in 5 irregular rows are 23 large ash trees. In the northwestern quadrant is a water fountain, a *farol* from the old lighting system, and a number of semipermanent wooden shacks or

booths for curiosities and meals of hot food. At the north are house walls broken by a few windows and doors, and one butchershop. At the south is an entrance to the main churchyard and a *tienda de abarrotes*. The entire western front gives directly onto the Calle Nacional. Although the eating stalls and the curiosity booths are open every day, there is nothing which approaches a permanent market such as one finds in Ciudad Hidalgo, Morelia, Zamora, Sahuayo, and some other larger towns in Michoacán and elsewhere in Mexico. On market days the only additions are the chalked areas upon which the occupants pay a tax to the municipal treasury. (See discussion of Municipal Finances, pp. 111-112.) Most of the goods for sale are displayed on tule mats or *petates*. There is a somewhat orderly arrangement of the market by commodities and by communities. Along the parish house are stacks of *petates* for sale by men from San Andrés, San Jerónimo, Santa Fe, and occasionally from other lake communities. The northern third of the plaza is occupied chiefly by venders of vegetables. These vegetable sellers, chiefly women, are normally arranged in four parallel rows. The women from each community represented (Ichupio, Tzintzuntzan, Santa Fe, Quiroga, etc.) commonly have their *pisos* next to each other, but apparently this represents a desire to be among friends and acquaintances rather than any attempt toward community segregation. Approximately the middle third of the plaza is occupied by three or four rows of pottery merchants, both men and women, with sellers of utilitarian ware from Tzintzuntzan predominating. Along the sidewalk fronting the Calle Nacional are the venders of folk remedies, hats, bags, baskets, yardgoods, cheap jewelry, metates, etc. This can be termed the miscellaneous or "five and ten" section of the market. Along the same sidewalk and within the plaza, in the vicinity of the food stalls and the vegetables, are the venders of fruits, peanuts, fresh and cooked fish and waterbirds in season, lime, and a few other commodities. At the south end of the plaza, and near the walk leading to the side entrance of the church, are displayed goods which vary greatly in nature and in origin with the season, such as roasted agave or *mescal* and sugarcane.

Although we made inventories of the Quiroga market on several Sundays from December to

June, we have only hearsay information for the remaining months of the year. Consequently, we cannot present a complete list of the goods marketed and the communities represented for an entire year. The following summarized information, therefore, should not be considered as completely representative of the local market. From the records of the municipal treasury it seems that the greatest number of people and the largest value of goods are present invariably in December; the second most important market month is always September; and the third busiest month is commonly April. The poorest month is not invariable but it is most apt to be June, July, or August. The normal arrangement of months, from most commerce to least, is: December, September, and April; May, March, and October; January, February, and November; August, July, and June. This distribution represents the interaction of such factors as rainy season and main period of planting and cultivating (June–August), completion of maize and bean harvests (December), numerous or important festivals (December, September, and April—which usually contains both Easter Sunday and Palm Sunday), etc. The principal goods marketed are vegetables, fruits, and pottery. Some of the vegetables and fruits are locally produced, but the bulk of the items sold in the market come from outside of the area of Quiroga town and its ranchos. During our period of observation more than two-thirds of the venders came from Santa Fe, Quiroga, and Tzintzuntzan (with Ichupio, La Orilla, and other coastal communities); in a secondary group were venders from Morelia, Pátzcuaro, San Jerónimo, San Andrés, and Chucándiro; and there were smaller numbers from other communities (not represented at every market) such as Teremendo, Capula, Chapultepec, Cuanajo, San Nicolás Obispo, Ihuatzio, Comanja, etc. Most of the venders (especially those from Santa Fe, Tzintzuntzan, and the other lake-shore communities) sold fruits and vegetables of their own raising, and handicrafts of their own making. Perhaps one-half of the natives of Quiroga who sold in the market retailed fruits, vegetables, and other commodities purchased in Morelia, Pátzcuaro, Tacámbaro, and more distant points in Michoacán, Guanajuato, México, and other States. The merchants from Morelia and Pátzcuaro sold a large variety of items of quite varied provenience.

Items sold in the Quiroga market, December to June

Fresh and dried grains, flavorings, vegetables, and fruits

Dried beans.	Onions.	Lemons.
String beans.	Peanuts.	Limes.
Beets.	Green peas.	Mangos.
Cabbage.	Potatoes.	Melons.
Carrots.	Pumpkins.	Oranges.
Chayote fruit.	Radishes.	Papaya.
Chayote root.	Sesame seed.	Passionfruit.
Chilacayote.	Sweetpotatoes.	Peaches.
Chiles.	Tomatoes.	Pears.
Coriander.	Turnips.	Pineapples.
Cumin.	Avocados.	Plums.
Garlic.	Bananas.	Sugarcane.
Habas.	Capulines.	Tejocote.
Husk tomatoes.	Chirimoyas.	Sour tunas.
Jicama.	Citron.	Sweet tunas.
Lettuce.	Coconuts.	Watermelons.
Shelled maize.	Guavas.	White zapotes.
Marjoram.		

Other foodstuffs¹

Dried and salted beef.	Boiled habas.
Ranch cheese.	Boiled and roasted maize ears.
Cooked and uncooked ducks and coots.	Roasted mescal.
Eggs.	Tamales.
Cooked and uncooked fish.	Semitas, corundas, and other breads.
Boiled chayote fruit.	Pulque.
Boiled chayote root.	
Boiled chilacayote.	

Other items

Metates.	Folk medicines—Continued
Lime.	Flor de changunga.
Chocolate beaters.	Guaco.
Fire fans.	Habilla de San Ignacio.
Wooden spoons and ladles.	Jamaica.
Chinaware.	Nuez moscada.
Enameled ware.	Ojo de venado.
Tinware.	Palo de brasil.
Sieves.	Palo de quina.
Pottery.	Palo de Tres X.
Petates.	Peonía.
Oil lamps.	Pimienta.
Brooms.	Pimentón.
Baskets.	Pinzán.
Carrying bags.	Pirul berries (also for birdseed).
Soap.	Prodigiosa.
Beeswax.	Tabachín.
Lagenaria gourds.	Ucuare.
Crescentia calabashes.	Etc.
Folk medicines:	Canvas.
Anís.	Woolen cloth.
Anís de estrella.	Cotton prints, etc.
Bola de caulote.	Ribbons.
Cirián.	Stockings and socks.
Copal.	Straw hats.
Clavo.	

¹ This list does not include the foods served in the booths.

*Items sold in the Quiroga market, December to June—Con.**Other items—Continued*

Trousers.	Handkerchiefs.
Huaraches.	Sashes.
Shoes.	Belts.
Purses.	Napkins.
Needles and pins.	Toy guitars.
Scissors and knives.	Dolls.
Threads and yarns.	Other toys of wood, terra cotta, etc.
Mirrors.	Glass.
Combs.	Religious pictures.
Palm raincoats.	Cheap jewelry.
Blankets.	Etc.
Shawls.	
Shirts.	

The origins of commodities produced within the Pátzcuaro Basin could be determined rather readily, but many items purchased from wholesalers in Morelia, Pátzcuaro, Tacámbaro, etc. could not be traced farther. Most of the vegetables were raised in the lake lowlands near Tzintzuntzan, Chapultepec, Santa Fe, and Pátzcuaro; small quantities were raised in Quiroga; *jicamas*, peanuts, and sweetpotatoes came chiefly from the State of Guanajuato; potatoes came in part from the Valley of Toluca; chile peppers came from the Pátzcuaro Basin, the *tierra caliente* to the south, Queréndaro and Chucándiro to the north, and the States of Aguascalientes, Guanajuato, and San Luis Potosí; garlic was purchased wholesale in Morelia and Pátzcuaro and also came from Panindícuaro; onions were produced in the basin, purchased from jobbers in Morelia and Pátzcuaro, and obtained from Chucándiro and Panindícuaro; sour tunas came chiefly from the Morelia area; and sesame seed came from the Balsas Basin. Most of the temperate and some of the subtropical fruits came from the Pátzcuaro Basin and the Tarascan sierra. Most of the tropical fruits were attributed to Pátzcuaro, Tacámbaro, and Ario de Rosales, although in most of these cases the actual origin was from communities in the valleys and slopes leading down to the *tierra caliente* or in the heart of the *tierra caliente*, such as La Huacana, San Pedro Jorullo, Apatzingán, and Taretan. Bananas also came from Veracruz and Tabasco; pineapples came from Guerrero, Veracruz, and Oaxaca; coconuts came from coastal Guerrero as well as from the Balsas Basin; most of the oranges came from the Montemorelos district in Nuevo León; the melons were

from Guanajuato State and the watermelons came from the *tierra caliente*, and sugarcane was brought in from both the south and the north (Chucándiro, etc.). Most of the dried beef and the cheese originated in the *tierra caliente*. The other foodstuffs came principally from the northern lake communities, especially Tzintzuntzan and Santa Fe. The other items had quite varied origins: metates from San Nicolás Obispo (about 12 miles to the east at the foot of the Cerro del Aguila); lime from Etúcuaro el Grande (south of Acuitzio); chocolate beaters, wooden spoons, and rebozos from Paracho; fire fans of tule and of wheat straw from Santa Fe and Quiroga; cheap china-ware (chiefly Amfora and Favorita marks) from Mexico City; glass from Mexico City, Puebla, and Guadalajara; enameled ware and oil lamps from Monterrey; baskets from Ihuatzio and Capacho; utilitarian and some decorative pottery from Tzintzuntzan, Santa Fe, Capula, Sipiajo, and Dolores Hidalgo; *jicaras* and *bules* from Uruapan and San Pedro Jorullo; most of the folk medicines from the *tierra caliente*; canvas from Salvatierra in Guanajuato; woolens and cottons from the Federal District, Querétaro, Guanajuato, Puebla, and Veracruz States; straw hats from Jarácuaro and Sahuayo; etc.

By 8 o'clock in the morning the market was in full swing, and by 3 o'clock in the afternoon most of the people had left. On the basis of checking ordinary Sunday markets (not markets that coincided with important festivals) we concluded that there seemed to average between 70 and 90 venders (not counting members of a family who might assist in selling). In addition to the venders in the market there were many individuals who sold their commodities directly to wholesale and retail merchants in Quiroga. We were not able to make an adequate check of such individuals. Also, on Sundays there was an increase in the number of people who peddled their wares through the streets and in the number of miscellaneous *puestos* in the arcades and on some of the sidewalks away from the market plaza. The ease and rapidity of bus communication between Quiroga and Morelia and Pátzcuaro has greatly increased the number of traveling merchants who handle assorted wares ranging from cheap jewelry and toys to ready-made clothing.

TRANSPORTATION AND COMMUNICATION

HISTORY

There is very little information concerning the status of transportation and communication in Cocupao-Quiroga during the colonial period. Its position on the most direct route from Pátzcuaro and Tzintzuntzan northward to the hot springs of Chucándiro and Puruándiro, the great estates of the Villaseñor family centering on Huango, and the mining communities of Guanajuato, undoubtedly produced a considerable amount of through traffic during the sixteenth century. However, the substitution of Valladolid-Morelia for Pátzcuaro as the most important settlement in Michoacán in the last quarter of the sixteenth century undoubtedly reduced this traffic to a small fraction of what it had been. The main roads from Pátzcuaro and Tzintzuntzan to Valladolid led to the east of Cocupao throughout the colonial period and until the 1920's; and the two main highways crossing Michoacán from east to west went to the north and south. Until the modern highway was constructed the chief route from Morelia to Guadalajara went through Tiristarán, Tecacho, Caurio, Tlazazalca, and Zamora to the north; and the southern alternate route went via Capula and El Correo or by way of Santiago Undameo and Jesús Huiramba to Pátzcuaro, and thence westward through Pichátaro, Sevina, etc. Effectively the entire northern portion of the Pátzcuaro Lake Basin, from Tzintzuntzan around to Erongarícuaro became a peripheral or "offside" area which was practically never visited by strangers or foreigners, and which was traversed only by a fairly local traffic. Although a few individuals who have written of their travels in Michoacán did make an effort to visit Tzintzuntzan from Pátzcuaro, no one visited or went through Cocupao-Quiroga. For example, Alexander von Humboldt in 1803 went through Capula, but he continued on directly to Pátzcuaro; in 1826 G. F. Lyon passed through Tiristarán to the north; and the many travelers from the 1830's on (such as Madame Calderón de la Barca, W. H. Bullock, E. Seler, and C. Lumholtz) got no closer than Pátzcuaro and Tzintzuntzan.

However, despite its offside position with reference to main highways, Cocupao-Quiroga became an important point on a secondary trans-

portation network. A number of communities to the north of the Pátzcuaro Basin continued to be in the political jurisdiction of Pátzcuaro, and the trails from these settlements (such as Coeneo, Huaniqueo, and Teremendo) converged on Cocupao. Furthermore, wheeled traffic between the mining settlements of Guanajuato and the rich agricultural communities of the *bajío* to the north and the *tierra caliente* and Pacific coastlands to the south virtually was lacking until the twentieth century. One of the leading *arriero* routes from Acapulco and Zacatula on the coast to Guanajuato went through Pátzcuaro and Cocupao. This route was of considerable importance until the railroad network began to develop after 1880. The old Mexican National Railroad, building out from Mexico City, reached Toluca in 1880, Acámbaro in 1883, Morelia on September 12, 1883, Lagunillas on November 16, 1885, Pátzcuaro on June 1, 1886, and Uruapan on February 13, 1899. In 1934 an extension southward from near Uruapan was begun, which was planned to reach the coast at Petatlán or Sihuantanejo, but so far it has been completed only to Apatzingán on a western lateral from the main route. Also in the 1880's the Mexican Central Railroad was built between Mexico City and Ciudad Juárez, and a western lateral was extended from Irapuato via Pénjamo to Guadalajara. In 1909 these railroads and others were consolidated into the National Railways of Mexico, and between 1910 and 1914 a branch line was built from Pénjamo through Zacapu and Comanja and a short distance west of Opungio and Erongarícuaro to Ajuno on the railroad between Pátzcuaro and Uruapan. These railroads cut heavily into the carrying business of the *arrieros*, reduced the trade area of Quiroga, and converted the bulk of the carrying business into a short haul over the 13-km. route from Quiroga to the nearest point on the railroad at La Cacana, or Estación Chapultepec as it is now known.

HIGHWAYS

During all of these years Quiroga depended primarily on pedestrians and on pack animals to move its goods. The prehistoric Tarascans lacked pack animals, and humans packed everything on their backs, shoulders, and heads. Although the Spaniards introduced the horse, the burro, and the mule in the 1520's and 1530's, apparently wheeled vehicles were not used in the northern

part of the Pátzcuaro Lake Basin until some time in the nineteenth century. As late as 1884 León (1887-88) stated that the only vehicular road connecting Quiroga with the outside world was the road south to Pátzcuaro, which bypassed Tzintzuntzan by using the Zirandangacho-Puerto del Colorín route to the east of the Cerro Yahuarato. However, in 1873-75 the *ayuntamiento* of Quiroga improved the road eastward via Atzimbo to El Correo so that it was considered to be good enough for a *diligencia* (stagecoach), but apparently no stage route was established. Even earlier, in 1861, there is mention in the municipal records of an *Estación* and of an *Estación Vieja*. Possibly these stations were the depots of a stage line between Quiroga and Pátzcuaro. During the regime of Governor Jiménez 1885-91 many roads were paved with cobblestones, and stone bridges were constructed over the larger streams in various parts of Michoacán. From this period, and specifically from 1886, dates the connection of Quiroga with the outside world over "improved" highways. However, only the roads to Pátzcuaro and Morelia were opened to wheeled traffic. These various highways or *caminos reales* were periodically repaired, the last time being after the revolution, in the 1920's. In that same decade a "graded" highway entered Quiroga. The exact date is uncertain but apparently a dry weather road westward from Morelia toward Guadalajara reached Quiroga about 1925, and in that year the first automobile passed through Quiroga. However, the present main highway from Mexico City to Guadalajara (National Highway No. 4) was not completely widened and graded as far as Quiroga until 1937, and the oiled pavement was not completed into Quiroga until 1938.

The present status of the paved (oiled) roads in the region is as follows: Camino Nacional Numero Cuatro, Mexico City to Guadalajara, all paved, 427 miles. Quiroga is a trifle west of the midway mark, being 222 miles from Mexico City and 205 miles from Guadalajara. At Quiroga a paved branch road goes south through Tzintzuntzan and Pátzcuaro to Tacámbaro, 49 miles distant, and a lateral from this road continues via Ario de Rosales into the *tierra caliente* and across the Balsas River (this is not an all-weather road). Forty-five miles west of Quiroga, at the Carapan Y, a paved branch road goes by way of Cherán and Paracho to Uruapan, a dis-

tance of 43 miles. A dry-weather road continues from Uruapan into the *tierra caliente*, and ramifications connect with Lombardía, Apatzingán, Tepalcatepec, etc. Some distances from Quiroga are:

Quiroga—east:

Atzimbo, 2.5 miles.
Puerto del Tigre, 7 miles.
El Correo, 9.5 miles (off the road).
Iratzio, 10 miles.
Capula, 13 miles (off the road).
Tacécuaro, 16 miles (off the road).
Morelia, 26 miles.
Ciudad Hidalgo, 89 miles.

Quiroga—west:

Santa Fe, 2.5 miles.
Chupécuaro, 4.5 miles.
San Jerónimo, 7.5 miles (off the road).
Puerto Aratzipo, 9 miles.
Comanja, 16.5 miles.
Zacapu, 26 miles.
Carapan, 45 miles.
Zamora, 69 miles.

Quiroga—south:

Patambicho, 2.2 miles.
Tzintzuntzan, 5 miles.
Pátzcuaro, 15 miles.
Ario, 47 miles.

All public roads used by through traffic are referred to as *caminos reales*. Such roads that can be negotiated by wagons and automobiles are called *carreteras*, as distinguished from *caminos de herradura* which are narrow roads and trails that cannot be used by wheeled vehicles. There are a number of *caminos de herradura*, most of which are quite ancient and in very poor condition, which fan out toward the northwest, north, northeast, east, and southeast. The more important of these trails go to Coeneo; Teremendo and Huaniqueo; La Tirimicua, Icuácató, Sajo, and Chucándiro; Caríngaro or Atzimbo, Sanambo, and Capula; and Zirandangacho, Corrales, El Crucero, and the Estación Chapultepec. All of these roads are in such poor repair that many sections are difficult to traverse either on horseback or on foot. Theoretically the municipality should repair and maintain the roads within its domain, but nothing has been done for a number of years.

Although the paved roads are used somewhat by locally owned motor vehicles, most of the traffic consists of passenger busses, freight trucks, and Mexican and foreign tourists. The pedestrians and animal drivers are learning to keep to the sides of the roads or to stick to the old trails.

BUS LINES

In 1945 there were owned in Quiroga 1 motorcycle, 13 bicycles, 8 passenger automobiles, 6 trucks (*camiones de carga*), and 3 pick-up trucks (*camionetas*). Fourteen individuals, all of them merchants or industrialists, own the 18 motor vehicles, and one of these men owns 2 trucks and 2 automobiles. The most important factor in the transportation set-up in Quiroga consists of the numerous freight and passenger truck lines which operate through Quiroga, although no transportation company has a formal depot or station in Quiroga. However, there are eight men in Quiroga who work frequently or steadily as drivers (*chóferes*) or conductors and fare collectors (*cobradores*) for several of the cooperative bus lines which run through Quiroga. The first bus line over the Pacific highway (C. N. No. 4) was established in 1937. Since then, on the basis of laws 1937/1938 regulating cooperatives, numerous cooperative "societies" of limited responsibility (S. C. L.) were set up in the fields of passenger and cargo transportation. These autotransport companies are of two general types: those originating in Mexico City, Guadalajara, or in-between points (Zitácuaro, Morelia, Pátzcuaro, Tacámbaro, Ario, Uruapan, Zamora, Sahuayo, and Tizapán) which run busses and trucks from the starting point to Mexico City and Guadalajara; and local regional lines which cover segments of the Mexico City—Guadalajara route and adjacent areas off the main highways. There are at least a dozen bus lines which operate through Quiroga, and more than 40 passenger busses go through Quiroga daily. The comparatively few (eight) first-class busses (*Servicio de primera clase*) discharge passengers in Quiroga, but commonly do not stop to take on passengers. Practically all of the other busses make regular stops to discharge and take on passengers; a number stop 10 minutes to half an hour to allow passengers to eat in the restaurants or purchase food from the corner *puestos*; and several busses stop for incoming and outgoing mail. All stops are made near the intersection of Juárez, Nacional, Zaragoza, and the Plaza Principal, where there is the greatest concentration of restaurants, food, soft drinks, ice cream, and cigarette *puestos*, and curiosity shops.

The leading bus line is the Federación de Cooperativas "Estrella de Occidente," which runs first- and second-class busses directly between Mexico City and Guadalajara, with a limited number of stops en route. This federation of cooperatives (all of whose busses carry a large white star in a circle with the letters "EO" inside of the star) also provides local second-class service between Mexico City and Morelia, Mexico City and Tizapán, Mexico City and Uruapan, Mexico City and Sahuayo, Morelia and Guadalajara, Zitácuaro and Tacámbaro, Morelia and Tacámbaro, Morelia and Uruapan, Morelia and Zamora, and Morelia and Tizapán. All of these busses run through Quiroga. The busses of this line and all others are commonly referred to as *flechas* (arrows), although none carries an arrow at the present time, and it has been many years since a red arrow was employed as a distinctive symbol. First-class busses normally are decorated in blue and white, and second-class busses are painted in red and white, although one local second-class line has painted its busses in blue and cream. In addition to "class" colors, the name and symbol of the line, and the names of the terminal cities in large letters, nearly every bus has its individual name (like Pullman cars), which may be that of a place along the route (e. g., Zapotlanejo), some regional item of note (e. g., Mariachi), etc.

Other bus lines are:

- "La Occidental de Transportes," Mexico-Morelia-Guadalajara, second class.
- Sociedad Cooperativa de Trabajadores de Auto-Transportes, Mexico-Morelia-Pátzcuaro-Uruapan-Guadalajara-León, second class.
- "Valle de Guayangareo," Mexico-Morelia-Pátzcuaro-Uruapan-Guadalajara-León, second class.
- Auto-Transportes "El Duero," Mexico-Morelia-Guadalajara-Uruapan, second class.
- Sociedad Cooperativa de Auto-Transportes de Pasajeros "El Aguila," Mexico-Morelia-Guadalajara, second class.
- Sociedad Cooperativa "Transportes del Suroeste," Morelia-Quiroga-Pátzcuaro, second-class mixed passengers and freight.
- Sociedad Cooperativa de Auto-Transportes "Tacamba," Morelia-Pátzcuaro-Tacámbaro, second class.
- Sociedad Michoacana de Auto-Transportes del Suroeste, Ario-Pátzcuaro-Quiroga-Morelia, second class.
- Name not ascertained, Morelia-Quiroga-Comanja-Coeneo-Huaniqueo, second-class mixed passengers and freight.

Most of the inhabitants of Quiroga have neither the opportunity nor the desire to use the first-class busses. Such busses differ from the second-class busses in color; are newer and in better repair; have better motors and make faster time; reserve seats for passengers and commonly do not carry more than four or five passengers above the legal limit (seated on jump seats in the center aisle); have leather-covered and comparatively soft seats; and provide more leg room. The second-class busses are generally dirty and in poor repair; frequently have engine trouble and punctured tires; contain hard wooden or scantily upholstered seats; are crowded to literal capacity; and will stop any place to discharge or take on passengers. The typical bus has a General Motors or Ford chassis and motor, with a body constructed in Mexico. There are two doors for passengers at front and back on the right-hand side, and a ladder at the back leads up to a large luggage platform on top. In front, near the driver's seat, is a small picture or image of the Virgin of Guadalupe with a small electric light instead of candles. Apparently the Virgin has replaced Saint Anthony and Saint Christopher as the patron of travelers and transporters of goods. At each stop there is a struggle between passengers descending (usually to buy a bottle of pop, a tamale, or some *tacos*) and would-be passengers hoping to find seats. However, seats temporarily abandoned but marked with a hat, bag, or comic book, or protected by other passengers, normally are respected. After the last passenger has been crammed into the bus the collector slams the doors shut, mounts the rear ladder, and signals the driver to proceed by banging on the body of the bus. When the town has been cleared, the collector worms his way into the bus, and begins to sell tickets to the new passengers. His progress is slow, since usually all 18 to 28 seats are filled, and the aisle is crammed with standing men and squatting women. On several occasions we have counted between 40 and 50 passengers in busses whose legal limits were one-half of those figures. A further complication is introduced by the fact that many passengers, usually those going to the nearest market town, will have baskets and sacks (containing everything from maize and eggs to pigs and poultry) with them inside the bus. Passengers who get on busses in Quiroga commonly can get seats by the time the bus reaches

Morelia (there is relatively little movement westward), but occasionally they must stand the entire way into Mexico City. When going through certain well-policed towns the standing passengers are requested to duck down so that the bus will seem to have only a legal load. Should a passenger feel the urge of nature, all he has to do is bang on the side of the bus and the driver commonly will stop. Some fares in 1945 were: first class, Mexico City to Quiroga, \$11.60; second class, between Quiroga and Mexico City, \$8.10; second-class, Quiroga to Morelia, \$1; second-class, Quiroga to Zacapu, \$1; and second-class, Quiroga to Pátzcuaro, 50¢. The second-class schedule calls for 1 hour to cover the 26 miles to Morelia, but commonly it takes 75 minutes; the return trip is a trifle faster.

ARRIEROS

The presence of passenger- and freight-transportation lines, and the ease of communication over oiled roads with railroad stations at Morelia, Pátzcuaro, and Comanja, have nearly eliminated all other forms of transportation excepting local traffic in the municipality and northward. The *arrieros* consider that their profession practically has disappeared. Apparently *arrieria* has gone through three stages in the last one hundred years. Formerly the *arrieros* were traveling merchants who owned one or more mules or burros, and who would purchase any salable commodity (local or outside of the area) and transport it into regions where they could dispose of their cargo and return with other goods which could be sold en route or in the Quiroga area.

From 1886 until 1914 was the second stage or period, during which the development of a railway network constricted their area of endeavor. Many or most of the *arrieros* became hired transporters of goods between Quiroga and the railroad station at La Cacana. Most of the outgoing cargo consisted of maize, wheat, and beans. An indeterminate number of *arrieros* continued as traveling merchants. Some of these would travel as far as points in Guanajuato and San Luis Potosí to obtain merchandise which they would sell over the south and southeast of Mexico, from Colima to Chiapas and Tabasco. More commonly the *arrieros* would purchase pottery in Santa Fe and Tzintzuntzan, and *bateas* and other local products

of Quiroga, and would travel only 2 to 6 weeks, principally in the *tierra caliente* of Michoacán and Guerrero, and occasionally as far as Colima or Acapulco. The most common return cargoes consisted of bananas, rice, hides, salt, pineapples, coconuts, dried meat, and cheese (the order of mention of these commodities approximates that given us by a number of the older *arrieros*). The number of animals used and the quantity of cargo carried varied greatly according to the resources of the different *arrieros*. According to several of our informants, an average trip of about 22 days netted in the neighborhood of \$25. A commonly followed route led from Quiroga, through Tzintzuntzan, Pátzcuaro, Santa Clara (Villa Escalante), Ario de Rosales, Puente Alto, Rancho Nuevo, and on to Churumuco near the Balsas River, and return was made by way of La Huacana, Nuevo Urecho, and Ario de Rosales. Another commonly used route went by way of Ario and Nuevo Urecho and on across the Río Grande de Tepalcatepec to Carrizal de Arteaga where salt was purchased, and returned via Tumbiscatio, Nueva Italia (where rice was obtained), Lombardía, and Nuevo Urecho. A third but less important route went to Acalpican on the coast of Michoacán (in what was a part of Guerrero until 1906), via Carrizal de Arteaga, whence pineapples and salt were obtained. A fourth and quite minor route went to Coahuayana and on to the coast of Colima, which was also used by *arrieros* seeking pineapples and salt.

The third or modern period has witnessed the death of the religious *gremio*, the cessation of distant journeys, and conversion of practically all of the *arrieros* into hired packers of local products (chiefly grains, firewood, charcoal, adobes, tile, and water) within the municipality and as far as El Tigre, Chucándiro, and Teremendo. The *gremio de arrieros* is said to have disappeared when the oiled road entered Quiroga (*al entrar la carretera*) or "some 4 or 5 years ago" (as of 1945), which would be approximately between 1937 and 1941. Formerly it was one of the most important of the guilds in Quiroga, and took care of the festivities on some day in May in an especially elegant fashion. Two religious functions were paid for (a mass in the morning, and a rosary in the afternoon), many firecrackers were exploded during the day, a display of fireworks was made in the evening, musicians were hired, and the

members of the *gremio* had a banquet. The profession of *arriero* persisted until the highway was finished (oiled); and then the *arrieros* (so the local accounts go) gave up completely, and abandoned, gave away, or sold all of their animals. The few animals (burros) now owned by the *arrieros* were purchased more recently after some of the men had gotten over their initial despair. No distant trips, even to Churumuco or Arteaga, have been made for a number of years. At present there are 23 *arrieros* (including sons, and some old men). Their average income is \$1 per animal per day.

LAKE TRANSPORTATION

Since the lands immediately touching the lake belong almost entirely to Santa Fe and Tzintzuntzan, the people of Quiroga are not and never have been users of the lake. They do not fish, hunt ducks, cut tule, or own any type of watercraft. However, from about 1888 until about 1918 some use was made of a lake steamer which was launched at the Pátzcuaro *embarcadero* in 1887. This ship, the *Mariano Jiménez*, reached Veracruz in January of 1887 in 800 pieces. It was floated at Pátzcuaro May 5, 1887, as a two-decked, 85-foot, steam-propelled vessel which could make 4 knots an hour. For some 30 years this ship made fairly regular daily cruises of the lake which included stops for passengers and freight at Ibarra, Charahuen, Erongaricuaro, San Andrés, and Quiroga. Between 1887 and 1889 the municipality of Quiroga constructed a cobblestoned highway (Calzada del Muelle) south from Las Carreras to the lake shore, and erected a small wharf (*muelle*). At present the road dwindles off into weeds and fields near the lake, and no vestige of the wharf remains. From about 1918 into the 1920's motorboats made regularly scheduled trips from Pátzcuaro to Quiroga. Some of the Pátzcuaro motorboats at present make chartered trips to the Quiroga shore, but this is rare since the passenger must wade ashore through the tule and mud shallows and then has nearly a mile to walk before reaching town. Very definitely Quiroga is not a "lake community," although it is situated within the lake basin and within sight of the lake.

COMMUNICATIONS

The mails, a telephone line, and private radio receiving sets constitute the chief forms of com-

munication with the outside, in addition to the ubiquitous "grapevine telegraph." By at least 1843 a post office (*oficina de correos*) was established in Cocupao-Quiroga. In 1868 mails went out and came in three times a week, through Pátzcuaro and Morelia. At some uncertain time in the nineteenth century the office was raised to the rank of a first-class post office (*administración de correos*). At present it is a full-fledged first-class post office with a postmaster, one to two clerks, and one postman (*cartero*). There are two dependent postal agencies, one in Tzintzuntzan and the other in Santa Fe (unpaid and unofficial). Office hours are from 9 to 13 (1 o'clock) and 15 to 18 on ordinary days, and 9 to 13 on Sundays and holidays (with curtailed service). Mail is delivered to houses twice daily. There is one mailbox (*buzón*), in the Portal Hidalgo, whence mail is collected at 7:30 and 15:15 daily. The mails are carried under contract with the Sociedad Michoacana de Auto-Transportes del Suroeste. Mails go out daily to Morelia at 8, 9, and 15:50, and to Pátzcuaro at 9:15 and 16:15; and mails come in daily from Morelia at 9 and 16:15, from Pátzcuaro at 8 and 15:45, and from Coeneo at 9. As mentioned previously, there is no Federal building, and the post office is in the home of the postmaster who for many years has been Don José Medina Gaona. This post office does an unusually heavy business in domestic and international money orders due to export of chairs and other regional handicrafts, import of wheat, and remittances from *braceros* to their families in the northern part of the lake basin. However, the movement of letters and periodicals is relatively small (table 30).

The movement of monies into and out of Quiroga indicated by the above statements of money orders sold and cashed does not represent more than a major fraction of such movements in Quiroga. Several of the merchants and industrialists serve as private bankers, and both issue and accept letters of credit and a variety of drafts. Furthermore, quite frequently the monies involved in the export and import of commodities by the carload (through Morelia and Pátzcuaro) are handled by drafts on banks. We were unable to obtain adequate information concerning such transactions. However, the cash involved in the movement of one carload often equaled an entire month's transactions in postal money orders.

TABLE 30.—Movements in the Quiroga post office, 1944-45

Year and month	Ordinary stamps	Air-mail stamps	Value of money orders sold	Domestic money orders cashed	International money orders from U. S. A. cashed
1944					
May.....	\$214.58	\$57.95	\$8,202.02	\$14,054.35	\$11,419.20
June.....	286.45	62.40	8,178.74	12,201.47	9,038.40
July.....	244.03	84.80	7,137.89	14,883.94	8,011.20
August.....	289.13	113.90	5,516.97	19,684.25	20,709.60
September.....	315.81	93.45	6,529.55	18,020.00	29,056.80
October.....	503.13	113.25	8,187.08	20,477.81	25,929.60
November.....	274.41	68.40	10,553.33	19,191.46	22,382.15
December.....	244.36	47.75	7,943.41	15,481.01	10,899.60
1945					
January.....	352.48	63.44	9,022.10	18,798.74	6,248.16
February.....	374.69	49.51	8,684.02	17,968.38	6,113.52
March.....	382.78	58.03	12,046.73	20,224.83	5,305.92
April.....	275.12	156.28	10,775.47	18,003.19	4,632.00
Total.....	3,756.97	969.16	108,657.31	208,989.43	159,747.16

A Federal telegraph line reached Pátzcuaro in March of 1871 and was extended to Quiroga in September of 1878. In 1893 changes were made in the system; the line between Morelia and Pátzcuaro became a combined railroad and State telegraph line; and the telegraph in Quiroga was replaced by a State telephone office. In 1899 a connection was made with a telephone line which came down from the north through Puruándiro, Huango, Huaniqueo, and Coeneo. At present the office of the Telégrafos y Teléfonos del Estado de Michoacán is in the Municipal Palace, and the scribe of the civil registry is also in charge of the telephone. In addition to this office there is one private subscriber in Quiroga.

There are no radios in the ranchos, since battery radios are unknown in the municipality, and all 62 radios in the town of Quiroga are operated by electricity obtained by plugging into electric light vents or sockets. These radios were distributed in 1945 among the *cuarteles* as follows: I—22 radios, II—11 radios, III—15 radios, and IV—14 radios. Naturally, these are only in houses wired for electric lights. Radios are found not only in the homes of the wealthier citizens, but also in a number of the stores (where they serve as sources of entertainment and information for a large part of the residents of Quiroga), and in an increasing number of homes of handicrafters (weavers, painters, et al.). The radio undoubtedly has been a great boon to Quiroga since it serves as newspaper and novel for the illiterate, and helps to compensate the workers for the increased commercialization of the handicrafts. We made no study of the subject, but the results of studies

elsewhere indicate that the workers in workshops equipped with radios are more contented and productive than those in shops without music or other entertainment.

All the electricity now used in Quiroga is provided by the line constructed by the Comisión Nacional de Electricidad from the Planta de Bartolinas near Tacámbaro. This line has a lateral near Sanabria which supplies a number of the southern lake communities, and the main line

continues from Quiroga through Santa Fe, Coeneo, Comanja, Tirindaro, etc. There are two transformers in Quiroga; and all consumption of electricity is under the supervision of Manuel Torres, the owner of the flour mill. This industrialist provided local electricity from 1930 to 1942 with a 13.5 kilowatt direct current plant. The first electricity in Quiroga dates back to 1906, when a wood-fueled two-dynamo steam plant "La Providencia" provided direct current.

LIFE IN QUIROGA

Although we made no formal investigation of what might be called the sociology of Quiroga, the results of occasional and random notes on such topics as religion, education, dress, foods, recreation, etc., are given here to round out the picture. Somewhat comparable material, in much greater detail, will be found in other monographs of this series—especially in Dr. George Foster's report on neighboring Tzintzuntzan (1948).

RELIGION

The material aspects of religion in Quiroga, as elsewhere throughout most of Latin America, are far more manifest than in most of the United States. This is to be expected because (a) the overwhelming majority of the people belong to one and the same church, and (b) this church—the Roman Apostolic Catholic Church—through its missionaries and priests introduced both religion and Western European material culture, and has been the arbiter in nearly everything from education and morals to dress and social affairs during the greater part of the past four centuries and more. Christianity was introduced to the Tarascans by Franciscan friars, and the first convent was established at Tzintzuntzan in 1526. A church under the patronage of San Diego de Alcalá was built in Cocupao-Quiroga about 1534. This church was a *visita* of the Tzintzuntzan convent and there were no resident friars for a number of years. The date of erection of a convent (the terms *casa*, *convento*, and *monasterio* are synonymous) with resident friars is uncertain. None of the Franciscan chroniclers give dates for the *presidencia* or *vicaría* (a convent subordinate to a larger convent known as a *guardiania*) in Cocupao, although most of the religious historians

imply that a convent existed in Cocupao from the first half of the sixteenth century. Since the inspector-general Ponce in 1586 spent a number of days in Tzintzuntzan, but made no mention of a Franciscan house in Cocupao, and since he proceeded northwestward around the lake from Tzintzuntzan to San Jerónimo Purenchécuaro, yet made no attempt to inspect Cocupao which was less than a mile off his route, we may conclude that the *presidencia* of Cocupao dates from after the Ponce inspection. We know practically nothing about church history and religious activities in Cocupao during the colonial period. Before the end of the sixteenth century Franciscan houses existed in Tzintzuntzan, Erongarícuaro, San Jerónimo, San Andrés, and Cocupao in the northern part of the lake basin; Santa Fe de la Laguna had been a secular rectorate since about 1534; secular clergy were in the neighboring parishes to the north and east (Tirindaro-Coeneo, Huaniqueo, Teremendo, and Capula); and Augustinian convents were a short distance to the east and south in Santiago Undameo (Necotlán) and Tiripitio. Franciscan influence was dominant in the area until Tzintzuntzan was secularized in 1780 and Cocupao in 1786-87, and the region ceased to be a part of the Franciscan province of San Pedro y San Pablo de Michoacán (founded as a *custodia* in 1536, raised to a *provincia* in 1566). After secularization Cocupao continued to be a *vicaría fija* of the parish (*curato*) of Tzintzuntzan until 1853. The independent *curato* was set up to include the newly made Villa de Quiroga and the ranchos of Sanambo, Icuácató, Caríngaro, and La Tirimicua, and this is still the area of the Quiroga parish. Atzimbo and Zirandangacho apparently are considered to belong to Tzintzuntzan, although politically they are now a part of

Quiroga. Because of the relative importance of Quiroga it has been made the headquarters of a *vicaría foránea* which embraces the parishes of Quiroga, Tzintzuntzan, Santa Fe, San Jerónimo and San Andrés, Teremendo, and Capula. The priests of these parishes sometimes meet in Quiroga, and the Quiroga priest occasionally visits the constituent parishes. Quiroga and these other parishes fall within the archdiocese of Morelia or Michoacán. The diocese of Michoacán was organized 1534/36/38 with the see in Tzintzuntzan for the first few years, then in Pátzcuaro for about 40 years, and ever since 1580 in Valladolid-Morelia. In 1863-64 Morelia was raised to an archdiocese, with Querétaro, León, and Zamora as suffragan dioceses, and Tacámbaro was added in 1913. Quiroga is directly under the Archbishop of Morelia.

THE CHURCH

Nothing now remains of the original colonial parish church or of the Franciscan convent, which were destroyed when Cocupao was burned in 1811 to prevent its use by royalist troops. The present parish church (La Parroquia) which was built about 1812-18 retains the simple lines and limited ornamentation which characterize most Franciscan churches as contrasted with Augustinian and Dominican. What may have been an imposing bell tower was truncated on June 19, 1858, when the most severe historic earthquake in the region tumbled down the upper member, which never has been replaced. The church proper consists of a simple boxlike nave terminating in a polygonal sanctuary or apse, with the main front entrance giving to the south onto the churchyard or atrium (the former cemetery), and a more commonly used side entrance opening on the west onto the Plaza de los Mártires. Attached at the back is the parish house in which live the priest, the sacristan, and a housekeeper; and all along the east side of the church and the parish house is a structure with several rooms which are used for a variety of purposes connected with the religious life of the community. The outstanding element in the interior of the church is the painted wooden ceiling. The old wooden altars were replaced in the 1880's with conventional modern altars of stone and composition. Because of the sequestration and abandonment of the other churches and chapels in Quiroga, the parish church has a

large collection of sculptured images (*bultos*) and paintings. The *bultos* were of:

San Diego de Alcalá—the patron saint, reputedly made in Italy, and easily the finest image in the church.

El Señor de la Preciosa Sangre—a reportedly miraculous image of Christ on the cross. This image is said to be made of maize cane paste (*caña de maíz*).

San Francisco de Asís—a quite good image of Saint Francis, possibly transferred from the chapel of the defunct Barrio de San Francisco.

San José.

San Antonio de Padua.

San Vicente de Paul—transferred from the chapel of San Vicente.

San Pascual Bailón.

Cristo Rey.

El Santo Entierro.

Jesús Nazareno.

Sagrado Corazón.

San Miguel Arcángel—transferred from the chapel of San Miguel.

Santa Teresita del Niño Jesús.

La Purísima Concepción.

Santa Ana.

María Santísima.

Nuestra Señora (the Virgin Mary) in the forms known as Carmen, Soledad, Dolores, Tránsito, and Peregrinos.

Among the more notable paintings were a fair painting of San Pablo (attributed by León to Cabrera), La Concepción, Nuestra Señora de Guadalupe, and 14 pictures representing the stations of the *Via Crucis*.

BELLS

The bells are reached by several flights of stairs up to a large chamber with a side door to the organ loft, then up a closely spiraled stairway or *caracol*, and finally up a short wooden ladder to the bell platform. There are seven bells of different sizes and ages. The largest bell (*campana mayor*) and three others were cast in Acámbaro in 1940 and 1941; two of intermediate size and uncertain origin date from 1901 to 1907; and the smallest bell carries the date of 1771. Bells no longer play the role in Quiroga and in most of the remainder of Mexico that they did for the major part of the past four centuries. Because of the lack of watches and clocks every parish church was supposed to have at least one bell large enough and in a tower high enough so that it could be heard throughout the parish—calling the congregation to church on Sundays and other feast days, indicating the hours of prayer, and serving as a swift messenger of tidings on such occasions as fire, bandit raid, or a call for public

assembly. A complicated "bell language" was developed to take care of the many periodic and special religious and secular calls. The first reduction in the use of bells was brought about by various anticlerical laws since 1859. In Quiroga the need for bells to indicate the time of day was eliminated by the installation of the town clock in 1895. Cheap watches, radio time signals, public order, newspapers, a reduction of religious fervor, and other factors have combined to reduce bell ringing to a mere echo of what it once was. Bells are rung at the discretion of the priest and, rarely, at the request of the *ayuntamiento*. The three Angeluses or *Avemarías* (*toque de alba* about 6 in the morning; *toque de las doce* at noon; and *toque de la oración de la tarde* about 6 in the evening) are not commonly rung excepting for the call to noon prayer, which consists of 12 strokes on one bell (on Sundays and feast days this is followed by a *repique* or series of peals). Apparently the *alba*, *doce*, and *oración* or *rosario* are indicated by ringing three strokes, pause, four strokes, pause, five strokes, pause, and one final stroke. A *misa cantada* or sung mass on Sundays and feast days is indicated by three calls or *llamadas* rung at about 15-minute intervals. These *llamadas* are initiated by three, two, or one stroke of the *campana mayor* (according to the time remaining before mass), and then a clamor of belfry bells and hand bells. An ordinary *misa rezada* or low mass is indicated by three *llamadas* of about 30 strokes or *campanadas* each followed by 1, 2, or 3 strokes. Quiroga, like most churches, has no high masses, since adequate personnel is lacking. In addition to the main calls to mass and prayer (which employ the larger bells), there are numerous minor calls of but a few strokes on one of the smaller bells which are addressed to particular segments of the population, such as the catechism classes and the members of the various confraternities or sodalities. Our general impression was that the bell language in Quiroga was quite abbreviated and corrupted; at least it differed quite a bit from usage we had observed in such other areas as Guerrero, Sinaloa, and Chihuahua. Undoubtedly a combination of local tradition or custom (differing among the Franciscans, Augustinians, Jesuits, regular clergy, et al.) and the personal bias of the curate conditions the nature of the vocabulary of the bell language

from one parish to another. It would be most interesting to make a current comparative study in different parts of Mexico to determine (a) actual status of campanology, (b) differences from one part of the country to another, (c) relative use for religious and secular purposes, (d) influence of the different orders in regional differences, and (e) changes from the nineteenth century and from the colonial period. At present in Quiroga the chief secular use of the church bells is to ring the *queda* or curfew.

THE CLERGY

Owing to such factors as the authority of the church, the office of confession, and control of education for more than three centuries, the local priests have exerted a great influence for both good and bad in Quiroga. Local opinion concerning the church and the local curates varies greatly. The majority of the inhabitants are good Catholics who criticize neither the church nor the priests. However, a minority (chiefly the *ejidatarios* of El Calvario) claim that the priests have always been in league with the merchants and large landholders to keep the common people in ignorance and to take away their lands. In any case the curate has always been a highly influential person. Since the parish priests have been the principal molders of character and arbiters of society in Quiroga, it seems pertinent to provide a list of these men. Owing to the lack of the Franciscan archives we do not have the names of the various friars who served in Cocupao-Quiroga excepting Fray Lucas Rincón, who was *guardián* of the convent in 1774 and possibly was the last Franciscan in Cocupao. At the death of the last friar (about 1786) Cocupao was entrusted to a *teniente de cura* who represented the proprietary curate of Tzintzuntzan. The first secular curate of Tzintzuntzan was Manuel Gregorio González de Anzo, 1780-83, who was succeeded by Juan de Dios Malagón 1783-86, Dr. Gabriel Bartholomeo Gomes de la Puente 1786-87, and Gerónimo Sandí 1788-1804. These and nine later priests were the proprietary curates of Tzintzuntzan, Ihuatzio, and Cocupao until 1853 when Cocupao-Quiroga was erected into an independent *curato*. Despite the fact that the ecclesiastic historian Romero gives the date of 1853, a notation in the church records of Quiroga states that Quiroga was

erected as an independent parish in July of 1847. If this notation is correct** Juan de Dios Torres (who was *teniente de cura* beginning in September of 1842) was the first proprietary curate, July 1847 to April 1853 (see footnote 1 to list below). Other *curas* have been:

Rafael Acuña.....	1853-54.
Fr. Francisco Aguirre.....	1854-55.
Clemente Vilchis.....	1855.
Zeferino Sánchez.....	1855-56.
Rafael Acuña.....	1856.
Andrés Zannettini.....	1856.
José María Reyes.....	1856.
José Leonides Dávalos.....	1856.
José María Reyes.....	1857.
Blas León.....	1857.
José María Reyes.....	1857-59.
Pablo Ramírez.....	1859.
Jerónimo Hurtado.....	1859.
Francisco N. de Medina.....	1859-60.
*Juan B. Menéndez ¹	1860-65. (Preached against the civil register.)
Pablo Ramírez.....	1865.
*Porfirio Herrera.....	1865-68. (Preached against the republican govern- ment.)
**Francisco de Paula Pla- sencia.....	1868-89. (Unified the town, developed charity, died as <i>cura</i> of Quiroga. Univers- ally revered.)
Francisco Ponce.....	1889. (Curate of Santa Fe, temporarily over Quiroga.)
José María Villalobos.....	1889-90. (Born in Chucándiro.)
Francisco Ponce.....	1890. (Temporarily again.)
**Eucario Farías Herrera.....	1890-1901. (Born in Angan- gueo.)
**José Otilio Vivanco.....	1901-1913. Born in Santa Ana Maya. Constructed the chapel of San Vicente. Founded several religious organizations.)
Rafael García.....	1913-14.
Erasto Portillo.....	1914-16. (Born in Huetamo.)
*Francisco de Paula González.....	1916-19. (Born in Celaya.)
Fabián Martínez.....	1919.
Rafael Lemus.....	1919-21. (Born in Pátz- cuaro.)
Francisco Aguilera.....	1921.
**Catarino Vivanco.....	1921-30. (Born in Santa Ana Maya.)
Damián Alvarez.....	1930-31. Born in Pichá- taro.)
Francisco F. Rubio.....	1931-35.
Gregorio Coronado.....	1935-36. (Born in Quiroga.)
**José Jesús Olivares.....	1936-. (Born in Tancitaro in 1880.)

¹ An asterisk has been placed before the names of the curates who were most influential in the life and affairs of Quiroga. Two asterisks indicate the priests who most conditioned life in Quiroga.

RELIGIOUS ORGANIZATIONS

The oldest secular or lay religious organizations were the hospital of the Indians and the associated *cofradías* or confraternities. Unfortunately the archives of the hospital cannot be located. Probably next in antiquity were the occupational guilds or *gremios*, which are nearly defunct even in the purely religious aspects. Quite ancient was the organization of the community into religious groups by *barrios*, and as late as the first half of the nineteenth century we find mention that the *barrio* of San Francisco paid the expenses of the Saturday masses. At present there is little left of such areal organization excepting a dichotomy of the town with respect to the ceremonies pertaining to the patron saint San Diego de Alcalá. Undoubtedly old, and with an unbroken history since some time in the colonial period, is the Third Order of Saint Francis (Venerable Orden Tercera de San Francisco) to which belong many of the leading citizens of Quiroga. During the second half of the nineteenth century several members of the *ayuntamiento* were removed because they were members of this order and refused to take the oath of office which implied carrying out anticlerical laws.

At present there is a variable number of lay religious organizations many of which last but a few years and then are replaced by other groups organized for some special purposes. Probably more than 90 percent of the adult population belong to one or more of these religious organizations. These groups go by various titles, such as sodality or confraternity (*cofradía* and *confraternidad*), brotherhood (*hermandad*), *asociación*, *congregación*, and *culto*. There is some confusion in the titles used by these pious associations and popular devotions and the titles used locally do not always agree with official church rulings and definitions. The following list contains the names of most of the organizations which have been active during the past 20 years. One asterisk indicates that the organization was active in 1945, and two asterisks mean that the organization is known to be more than a century old in Quiroga.

*Acción Católica.

*Adoración Nocturna.

*Apostolado de la Oración. (This is known in English as League of the Sacred Heart of Jesus.)

**Archicofradía del Inmaculado Corazón de María.

- *Asociación or Congregación de las Hijas de María Inmaculada. (The Sodality of the Children of Mary.)
- *Asociación de Madres de Familia.
- *Cofradía de N. S. del Carmen.
- **Cofradía de N. S. de la Concepción.
- *Conferencia de San Vicente de Paul.
- **Confraternidad or Devotos de la Preciosa Sangre de Cristo.
- *Congregación (Niños y Niñas) del Catecismo.
- *Culto Perpetuo de San José.
- *Devotos de la Divina Providencia.
- **Hermandad or Confraternidad de la Vela Perpetua.
- **Mayordomía del Santo Patrón San Diego.
- **Venerable Orden Tercera de San Francisco.

RELIGIOUS FESTIVALS

Quiroga has no outstanding religious festivals, ceremonies, or dances. Anticlericalism, the growth of a local agrarian group with atheistic or agnostic trends, comparative prosperity, and the lack of a truly Indian population, may explain this condition in part. However, apparently Cocupao-Quiroga never had a noted and widely attended festival or even a fair. Undoubtedly the comparative unimportance of Cocupao in colonial times, its subservience to Tzintzuntzan until only a century ago, and the presence of ancient and potent miraculous images or *bultos* in nearby Pátzcuaro and elsewhere in the region, combined to prevent the development of outstanding religious festivals in Quiroga. Judging from the religious festivals we saw from December to June (the period of the year which has the greatest religious activity) there is little that deserves special mention, and there is practically nothing which is unique. In the church all the days of the church calendar are fittingly observed, but very few of these days affect the tempo of life in Quiroga or result in public displays of fireworks, instrumental music, dances, pageantry, etc. Only some 6 or 8 days or periods are outstanding in the local religious calendar.

The Christmas Period.—From December 24 (Noche Buena) until January 6 (Día de los Santos Reyes) is a general time of relaxation and religious and secular celebration. December 24, December 25, January 1, and January 6 are the most important days. Fixed allegorical floats (*carros alegóricos fijos*) depicting events in the life of Jesus are set up; some individuals dress as the Wise Kings of the East (Los Reyes Magos); and there is some dancing and singing by groups representing the Reyes Magos and shepherds and shepherdesses (who are children). Also, in some

homes a *piñata* (container filled with candies and other goodies, hung from the ceiling) is displayed for a time; then it is broken and a scramble for the contents ensues. Private and public dances are common in this period, and fireworks are set off in the churchyard on several of the days.

Holy Week.—The Semana Santa, from Palm Sunday to Easter Sunday, is a period of intense religious devotion enlivened chiefly by the dances of the Moros y Cristianos, and the attire of so-called "Jews" (men dressed as women).

May, the Month of Mary.—In this month commonly a number of pious associations, guilds, and individuals defray the expenses of mass and church decorations (candles and flowers) on specified days. In May of 1945 the groups represented (not including private individuals) were:

- May 1, Devotos de la Divina Providencia.
- May 3, Cargueros del Santo Patrón San Diego.
- May 6, Devotos de la Preciosa Sangre.
- May 8, Congregación de Hijas de María Inmaculada.
- May 10, Hermandad, de la Vela Perpetua.
- May 11, Asociación de Madres de Familia.
- May 12, Superiores y Alumnas del Colegio Guadalupana.
- May 17, Venerable Orden Tercera de San Francisco.
- May 19, Niños y Niñas del Catecismo.
- May 20, Gremio de Panaderos.
- May 28, Gremio de Obrajeros.
- May 30, Gremio de Zapateros.

May 1, 2, 3.—On these three days the *cargueros* of the patron saint San Diego (men who are responsible for the program and much of the expense of the celebrations on the day of the patron saint, November 13) for the new year are changed or installed. There are two sets of *cargueros*—one for the upper town (El Calvario district in general), and another for the lower town. Each set consists of a *capitán*, an *alferez*, and a *sargento* (all terms of military rank). During these days there is much playing on *chirimías* (a type of flute), beating of drums, displaying of flags, and setting off of rockets and firecrackers. Coincidentally, May 1 is the day of Saints Philip and James, and it is also Labor Day, so little work is done, many firecrackers are set off, and much liquor is consumed. May 3 is the day of the Holy Cross, and that evening a large cross is outlined by many bonfires on the slope leading up to the Cerro de la Cruz. These fires formerly were of pitch pine, but now pieces of rubber tires are the chief fuel. This is a specially important

day for the Pueblo Nuevo district of Quiroga adjacent to the Cerro de la Cruz.

Corpus Christi.—In many respects this is the most interesting festival in Quiroga. The fiftieth day or 7 weeks from Easter is Pentecost or Whitsunday, and a week later is Trinity Sunday. On Trinity Sunday there is much shrilling of *chirimías*, beating of drums, and setting off of firecrackers. During the next 3 days preparations are made for Corpus Christi on the following Thursday. The most apparent changes in the landscape are the lines of colored paper streamers hung over the main streets, and the arrangements in the churchyard and the Plaza de los Mártires. Three henequen ropes are stretched between trees, and suspended on each rope is a catherine wheel or *rueda grande*. Each catherine wheel is an open framework of wooden rods, canes, and cords, about 6 feet in diameter and 2 feet wide, on each side of which are about 480 firecrackers or *bombas*, which are connected by a continuous fuse. Each *bomba* consists of a section of hollow cane about 4 inches long, explosive filler, paper and henequen cord used to wrap and tie it into its place on the wheel. When ignited the catherine wheels go off with the roar of a machine gun and a dense pall of gray-black smoke soon hides the rotating wheels from view. The wheels are made in Quiroga, and each one took three men about a week to complete. In addition to the wheels in the churchyard, numerous strings of firecrackers are strung between and around trees. In the Plaza de los Mártires an aisle is marked off from the side entrance of the church to the Calle Nacional by erecting two barriers of rope and criss-crossed cattails, and one or more orchids are tied at every intersection of the cattails. In addition to the Flor de Corpus orchids on the barriers there are hundreds more in festoons above the church entrances, and altogether there must be used more than 2,000 orchids in the Corpus Christi celebration. All day long and far into the night of the day before Corpus Christi (May 30, in 1945), there was the sound of *chirimías* and drums and the explosion of firecrackers. On Corpus Christi the flutes and drums were reinforced by four bands and orchestras from Ihuatzio, Santa Fe, San Jerónimo, and Teremendo. The musicians played and firecrackers were exploded sporadically throughout the day, but the real celebration did not commence until after-

noon. About 1:30 an orchestra and several *batea* dancers congregated in the municipal palace where they gossiped and rehearsed. This probably is not a normal occurrence, but in 1945 the *presidente municipal* was a *batellero*. The *batea* dancers were several young *batelleros* (apparently in their late teens) attired in normal holiday dress (best "straw" hat, store pants, shoes, colored blouse, serape), each with a *huacal* (framework of pine slats) on his back. Entwined with the framework of the *huacal* were ash leaves, orchids, and bougainvillea, and upon this background were eight or nine finished *bateas* and various items symbolic of the life and food of the *batelleros*. A common assortment contained three yellow chiles, one to three onions, a honeycomb or nest (*panal*) of the little black wild bee, a *huaje* (gourd for water), a strip of dried meat, and one or two *chichonas* (a bread made for Corpus Christi and the festival of San Diego, in the shape of an eight-pointed star with small protuberances or tits). The principal events of the day took place between 5 and 7 in the evening. First was the *rosario* or afternoon prayer in the church. This was followed by fireworks in the churchyard (catherine wheels, strings of firecrackers, giant firecrackers, and skyrockets). Next, about 6:30 p. m., was the much abbreviated Corpus Christi procession, which under the present laws should not make use of public streets. In Quiroga an open-air procession "within the law" was obtained by leaving the church through the side entrance, and winding around over and along the Plaza de los Mártires and the adjacent churchyard, and going back into the church by the main entrance. The procession route was marked by two rows of women holding candles. The order of the procession was: three boys in vestments of red, carrying a cross and two large candles; two drummers and one flutist; men carrying several huge candles preceding the image of San Diego on a handled platform decorated with seasonal fruits, orchids, and *chichonas* around the base of the image; an arch festooned with fruits and *chichonas*; and finally the *batea* dancers. After the procession thick flat breads were thrown down to the crowd by boys in the belltower. This was followed by the dance of the *batelleros* before the side entrance of the church. These *batea* dancers, in two groups, danced a simple Indian jogging step to the music of an orchestra. Because of

poor visibility due to the crowd and because of our own incompetence in such matters, our notes on the steps and the music are not worth reproducing. After this dance many little crude *bateas* were distributed among the audience. The final event was the gift of fruits and other local products to the curate. Altogether the Corpus Christi celebration preserves more of the spirit or atmosphere of the colonial period than any other still extant in Quiroga. The dance of the *batelleros* and the giving away of the miniature *bateas* serve to accentuate the former importance of *batea* making in Cocupao-Quiroga; and the giving of fruits and other items to the curate at this time is a retention of an ancient and wide-spread custom. However, many of the customs (described by Escobar and other colonial authors in Michoacán) have disappeared here, although retained in varying degree in a number of more Indian communities. Among these customs are such as displaying numerous elements of the flora and fauna, execution of masked dances, and display by all artisans of their wares in the plaza and the giving away of examples.

The other important festivals we did not observe. These are: Michaelmas or the Día de San Miguel on September 29 (especially important to the inhabitants of the *ex-barrio* of San Miguel), at which time there is much music, fireworks, and consumption of a special dish known as *pozole batido*; the fiesta of Cristo Rey on the last Sunday in October; and the great festival of the patron saint San Diego on November 13 and through an entire week, at which time there are dances of the Moros y Cristianos, costumes of great variety, and much music and fireworks. The other religious festivals are celebrated principally within the church, and only a few are accompanied by music, fireworks, dances, and other exterior displays. Among the lesser festivals of some importance are La Purificación de María or Candelaria (Candlemas) on February 2; Martes de Carnaval (Shrove Tuesday) and several days preceding; San José on March 19—the barn swallows are supposed to return on this day; Ascension Day, which in 1945 coincided with Mother's Day on May 10; San Isidro; May 15; San Juan Bautista, June 24; San Pedro y San Pablo Apóstoles; June 29; Preciosísima Sangre de Nuestro Señor, July 1; San Vicente de Paul, July 19; Santiago el Mayor, Apóstol, July 25; La Asunción, August

15; San Bartolomé Apóstol, August 24; Nuestra Señora de los Remedios, September 1; San Nicolás Tolentino, September 10 (chiefly in Santa Fe); San Francisco de Asís, October 4; Vigilia de Todos Santos to Día de los Muertos, October 31 to November 2; Purísima Concepción December 8; Nuestra Señora de Guadalupe, December 12; and Día de los Inocentes (All Fools Day) December 28. There is not much celebration of national patriotic holidays. The most important of these are the Grito de Dolores and so-called independence day September 15–16; May 5, commemorating the victory over the French at Puebla in 1862; February 5, celebrating the constitutions of 1857 and 1917; the Día de la Raza, October 12; and November 20, celebrating the Commencement of the Madero Revolution in 1910.

RELIGIOUS ATTITUDES

We made no attempt to ascertain the religion of the people in Quiroga since such questioning would have aroused needless antagonism. According to the census of 1940 all the inhabitants of the ranchos were Roman Apostolic Catholics, as were all but 55 persons in Quiroga town. These 55 persons (49 of whom were in the Calvario district) were listed as having no religion. Actually the census returns are not reliable since it is commonly assumed that everyone is a Roman Catholic. We noticed some of the original census schedules in which the column for religion had been filled out completely as *Católico* although there were not enough people in the censused unit to complete the schedule—which revealed the bias of the census taker. Probably there is a somewhat greater number of people (perhaps as many as 150) who should be listed as without religion since nearly all of the *ejidatarios* and their families are outside of the "pale" of good orthodox Roman Catholics. However, these individuals were raised as Roman Catholics and in terms of actual beliefs probably are as much Roman Catholics as most of the individuals who go to mass and confess. These people are anticlerical rather than anti-Catholic. There are no Protestants, Jews, or members of other faiths, although possibly two or three individuals might qualify as confirmed atheists. There are no pagans, and the retention of primitive pagan Indian beliefs and superstitions is probably no more than the amount of pagan superstition that is current among

Christians in many other parts of the world. Unfortunately, we did not have the time to investigate the folklore of Quiroga. From what we saw and heard, local beliefs seemed to represent a mixture of European and Indian elements, but often it was impossible to identify the origins. There is some belief in witches, but this could be either European or Indian in origin, and actually seems to contain elements from both sources. A considerable number of animals enter local folklore, among which we might mention the owl, which is considered a bird of ill-omen, and the rattlesnake, which is feared and respected for more than just its potent poison. If one sneezes in a crowd there will be heard a chorus of "Jesús, María, José." A few houses have "horse shoes" above the doors, and a considerable number of houses have one or more crosses on the roof for protection against lightning. In comparison with many parts of Mexico, there are remarkably few crosses along the roadsides, in the mountain passes, and on the hilltops. In summary, the people of Quiroga seem to be predominantly devout God-fearing Catholics whose theology is best represented by a bloody Christ on the cross, and the Virgin Mary in such guises as Our Lady of Sorrows, Our Lady of Succor, and the like. Here the Christian religion is one of pain and sorrow, under the constant shadow of death, but paradoxically relieved by the lighthearted music, dancing, fireworks, and drinking that commonly accompany so many of the religious festivals.

BAPTISMAL NAMES

The use of first names, forenames, or given names, goes back to great antiquity. The practice, developed during the first centuries of Christianity, of combining baptism and the giving of a forename with Christian associations has given rise to the term "baptismal name" (*nombre de pila*) or so-called Christian name. Such usage became almost universal within Christendom when Pope Gregory the Great urged the use of only given names with Christian antecedents; and such usage was stressed by Cardinal Jiménez in Spain, and by the Council of Trent for all Roman Catholics. Consequently, from the time of the Spanish Conquest of Mexico to the present time, all Europeans, mixed bloods, and converted Indians and their descendants have baptismal names of the generalized Christian type. This type includes

not only saints but also certain ancient heroes such as Romulus, Caesar, Hannibal, Alexander, and the like. In connection with saints' names, it must be kept in mind that comparatively few saints of the Christian church have received formal canonization at Rome. During the medieval period popular veneration and the approval of the local bishop were sufficient basis for considering any given individual as a saint. Consequently the various calendars of saints issued in different Roman Catholic countries and areas differ widely as to individuals included and excluded.

In Mexico, and specifically in Michoacán, certain trends can be noted. In general the lists of saints approximate those current in Spain. The most popular source of names in Mexico during the independence period has been the *Calendario Galván*, with its lists of feast days, patron saints, and the general list of saints. Locally, the parish priests and their personal likes and dislikes have conditioned the choice of baptismal names. On a larger scale, the various missionary orders have exerted great influence. Each order has its favorite saints, whose names were widely used in baptizing the Indians, and in the selection of patron saints for churches, convents, hospitals, and communities. Quiroga and the surrounding area was under the Franciscans from the 1520's until nearly the end of the colonial period. Naturally, such Franciscan saints' names as Francisco, Antonio, and Luis, were widely used. Apparently there was some influence from the Augustinian area a few miles to the southeast, and from the Jesuits in Pátzcuaro. However, of greatest importance were the baptismal names of general Christian usage; i. e., derived from Jesus the Christ, the remainder of the Holy Family, the sainted apostles, the archangels, the early Christian Fathers, and various events and personages of the whole Bible. The relative importance of these various types of Christian names will be discussed after the names actually used in the Quiroga area have been presented. Although often an individual might be given the name of one of the saints of the day upon which he was born, such practice was not true in the majority of the cases studied. As a result, most individuals celebrate two "birthdays"—their actual birthday or *día de cumpleaños*, and their saint's day or feast day of the saint after whom they were named. There was noted some tendency to name

children after the parents, and a greater tendency to name children after grandparents and after uncles and aunts. However, often these apparent trends represented merely the small range of selection afforded by the most popular names, such as José, María, Jesús, and the like.

MALE BAPTISMAL NAMES

To obtain the distribution and incidence of baptismal names we used the 1940 census of Quiroga and its ranchos. There were listed 1,952 males who possessed 342 different names. Possibly the number of different names actually is somewhat smaller since a number of variations of a name may have been introduced by the personal idiosyncrasy in spelling on the part of the census taker or of the informants. Examples are such names as Amado and Amadeo, Basilo and Basilio, Deodoro and Diodoro, etc., although in many of such cases the variant spellings have become accepted as different names. Again, there are variant forms that actually are derived from different saints, although the names were derived from a common ultimate source. Examples of this type include such names as Apolinar and Apolonio, Aurelio and Aureliano, Crescencio and Crescenciano, and Maximo, Maximino, Maximiano, and Maximiliano. The most common male given name is José (Joseph), which was recorded 115 times. Actually, the incidence of José is much greater, since 84 individuals used José in combined names such as José Jesús, José María, José Guadalupe, and the like. Since José is such a common name, it is frequently followed by a second name which becomes the name most commonly used for the sake of distinction. Often, in such a connection, the José is abbreviated to "J.," and the name will appear as J. Trinidad Sánchez, or J. Luis Torres, and the like. Quite often the baptismal name José will be dropped completely, and the original possession of the name can be determined only by consultation of the civil and parish registers. The number of such cases is unknown to us. However, it can be assumed that practically everyone who uses such first names as Jesús, María, Guadalupe, Encarnación, Carmen, Concepción, Cruz, Dolores, Refugio, Salud, Santos, Socorro, Soledad, Tránsito, and Trinidad, was baptized with an initial José. It will be noted that this group of names is composed of attributes of the Deity, events in the

life of the Savior and of the Virgin Mary, and the like. The second most used name is Jesús, which appeared alone 106 times, and preceded by José 31 times. Presumably, however, all individuals with the name Jesús were baptized José Jesús. We understand that the Roman Catholic church in Mexico is trying to discourage the use of Jesús as a baptismal name. When the abbreviation "J. J." is encountered, as in J. J. Valdés, it invariably stands for José Jesús, in just that order.

In the following tabulation are given the most popular names in Quiroga as of 1940. The number after each name is the incidence of that name in Quiroga. Where a second figure also is given it

Male baptismal names

1. José.....	115+84	42. Fidel.....	8
2. Jesús.....	106+31	43. Ignacio.....	8
3. Luis.....	77+6	44. Refugio.....	8+1
4. Diego.....	73	45. Rodolfo.....	8
5. Francisco.....	64	46. Tomás.....	8
6. Rafael.....	63+1	47. Adolfo.....	7
7. Salvador.....	59	48. Basilio.....	7
8. Antonio.....	58	49. David.....	7
9. Juan.....	51	50. Marcelino.....	7
10. Pedro.....	49	51. Marcial.....	7
11. Manuel.....	47	52. Marcos.....	7
12. Ramón.....	34	53. Primo.....	7
13. J. Jesús.....	31	54. Alberto.....	6
14. Miguel.....	31	55. Carmen.....	6+4
15. Leopoldo.....	25	56. Eduardo.....	6
16. Trinidad.....	21+3	57. Fernando.....	6
17. Isidro.....	16	58. Indalecio.....	6
18. Carlos.....	16	59. J. Luis.....	6
19. Felipe.....	15	60. Lázaro.....	6
20. Guadalupe.....	15+9	61. Porfirio.....	6
21. Santiago.....	15	62. Samuel.....	6
22. Alfonso.....	14	63. Socorro.....	6+1
23. Enrique.....	14	64. Arnulfo.....	5
24. Gregorio.....	14	65. Bonifacio.....	5
25. Joaquín.....	14	66. Eliseo.....	5
26. Vicente.....	14	67. Encarnación.....	5+5
27. Ismael.....	13	68. Evaristo.....	5
28. Nicolás.....	13	69. Gabriel.....	5
29. Daniel.....	12	70. Genaro.....	5
30. Andrés.....	11	71. Isidoro.....	5
31. Arturo.....	11	72. Javier.....	5
32. Lorenzo.....	11	73. Jorge.....	5
33. Ricardo.....	11	74. J. Encarnación.....	5
34. Agustín.....	10	75. Julio.....	5
35. Alfredo.....	10	76. Justo.....	5
36. Ángel.....	10	77. Melchor.....	5
37. J. María.....	10	78. Odilón.....	5
38. Leonardo.....	10	79. Otilio.....	5
39. Florentino.....	9	80. Pablo.....	5
40. J. Guadalupe.....	9	81. Roberto.....	5
41. Félix.....	8		

stands for the incidence of that name in combination with another name; e. g., José 115+84 means 115 cases of José alone and 84 cases in combinations, and Luis 77+6 means 77 cases of Luis alone and 6 times combined with José.

The incidence of the remaining names was: 22 names, four persons; 45 names, three persons; 78 names, two persons; and 125 names, one person. José, in all combinations, comprised a trifle more than 10 percent of the male population. The first 12 names listed covered more than 40 percent of the males; and the first 21 names comprised a little more than one-half of the male population of Quiroga. It will be noted that there is a decided break between the sixteenth- and seventeenth-place names, and that each of the first 16 names, plus Guadalupe, comprises 1 percent or more of the males.

COMPARISONS

An attempt was made to determine if there have been any important changes in the popularity of the various baptismal names since colonial times. For lack of extensive lists of Quiroga baptismal names during the sixteenth century, we examined the names of 1,579 males mentioned in O'Gorman's (1945) *Catálogo de Pobladores de Nueva España*. These males were distributed among 99 baptismal names. The first 5 names (Juan, 277; Pedro and Pero, 160; Francisco, 134; Alonso, 112; and Diego, 104) comprised approximately half of the males. The first 16 names (the above 5 plus Luis 62, Antonio and Antón 58, Gaspar 40, Cristóbal 39, Hernando, Fernando, and Hernán 59, Martín 36, Melchor 26, Miguel 25, Rodrigo 24, Gonzalo 20, Jerónimo 18) covered more than three-fourths of the males. Other names, in order, were Alvaro, Baltasar, Bartolomé, Sancho, Andrés, Jorge, Carlos, Sebastián, Bernardino, Gregorio, Manuel, Ruy, García, Gabriel, Felipe, Marcos, Tomás, Agustín, Lorenzo, Santiago, Leonardo, Blas, Domingo, Guillén, Mateo, Esteban, Felix, Gil, and Lope—which includes the top 45 names and all with an incidence of 5 or more.

Comparison of the two lists shows great differences. In the sixteenth century there was much less variety than at present. Jesús was not used at all in the sixteenth century; and José was not used in that form although there were 4 Joseph, and 1 each of Josepe and Jusepe. Names found in the top 16 of both lists were Juan, Pedro, Francisco,

Diego, Luis, Antonio, and Miguel. In addition to José and Jesús, Rafael, Salvador, Ramón, Leopoldo, Trinidad, Isidro, and Guadalupe (from the first 20 on the 1940 list) were completely absent or were not in the first 45 names on the sixteenth century list. On the other hand, from the top 20 in the sixteenth century list, Gaspar, Cristóbal, Fernando, Martín, Melchor, Rodrigo, Gonzalo, Jerónimo, Baltasar, Alvaro, Bartolomé, and Sancho were absent from the top 50 or were completely lacking on the 1940 list. Clearly the trend has been to minimize the old Hispanic given names (such as Hernando, Rodrigo, Gonzalo, Alvaro, Alonso, Sancho, Ruy, García, and the like), and to stress certain Christian religious first names (such as José, Jesús, Rafael, Salvador, Manuel, Trinidad, etc.). This trend probably was brought about by the Franciscan missionaries working among a people with no European traditions. Also, the Franciscans were the leading protagonists for festivals and cults commemorating the Holy Name of Jesus, St. Joseph, and the Blessed Trinity. Another factor involved was the fact that among the Spanish immigrants there were relatively few farmers, fishermen, carpenters, bakers, and members of other such lowly occupations, since these occupations were held in New Spain chiefly by the Indians and by the mestizos. Consequently, it was chiefly in these two groups that baptismal names derived from the patron saints of these occupations (Isidro, Andrés, José, Nicolás, et al.) were common.

Another list was compiled of the baptismal names recorded in the civil register during the years 1941–44. There were 402 names of male infants. It was thought that a comparison of this list with that of 1940 would indicate if the present comparative liberalism and anticlericalism had extended to Christian names. The leading 22 names, in order, were José, Rafael, Antonio, Luis, Salvador, Jesús, Diego, Ramón, Manuel, Leopoldo, Francisco, Isidro, Guadalupe, Pedro, Miguel, Rubén, Juan, Nicolás, Carlos, Raul, Roberto, and Carmen. This order, and the percentages involved, showed no important changes or trends, unless it might be a slight lessening in the use of Jesús, Diego, and Francisco. The baptismal names of 226 fathers of children born in 1945 were, in order, Jesús, Salvador, José, Diego, Manuel, Rafael, Pedro, Antonio, Luis, Leopoldo, Juan, Alfredo, Agustín, Felipe, etc., in descending

order. This list offers nothing new, but stresses the decline of Francisco.

From a study of the complete lists of names, it is apparent that there is very little tendency to name children after local heroes, presidents, motion-picture stars, and similar personages. For example, there apparently was no rise in the proportion of such names as Lázaro and Manuel during the presidencies of Lázaro Cárdenas (a native of Michoacán) and Manuel Avila Camacho. However, most of the persons named Porfirio were born during the rule of Porfirio Díaz, and all of the persons named Adolfo were born since 1933. These two instances are not very significant since the absolute number of cases involved is very small. We can conclude that the customs involving the baptismal names of males have altered very little since records began for Quiroga, and that the Roman Catholic Church and the Franciscans have been the most important factors in determining the popular names, as well as practically all of the other names in vogue. This contrasts decidedly with the situation in the United States. According to a study made some 15 years ago (Loughead, 1934) the most popular male names in the United States (in order) were: William, John and Jack, James, Charles, George, Edward, Frank and Francis, Fred and Frederick, Harry and Henry, Joseph, Tom and Thomas, and Robert. William is the name of about 8.6 percent of American males; more than one-third of the males in the United States possess one or another of the first 5 names listed; and the entire 12 names comprise about 54 percent of the United States male population. Nearly half of our presidents (14 out of 32) have had these names, and all of the kings of England since before the discovery of America had names from this group. In sixteenth-century England the top 12 names were John, William, Thomas, Richard, Robert, Edward, Henry, George, Francis, James, Nicholas, and Edmund. About half of the 12 names can be considered biblical or with strong religious connotations (John, James, George, Joseph, Thomas, and possibly Edward), while among the top 12 names in Quiroga only Ramón might not be so considered. We have decided vogues of naming children after movie stars, presidential candidates and presidents, and other ephemeral notables. Furthermore, there has been a great decline, in the United States, in the use of baptismal names selected from

the Bible. A few generations ago such names as Abraham, Daniel, Joshua, Reuben, Samuel, and Zachary were far more common than now.

FEMALE BAPTISMAL NAMES

The female baptismal names were studied in the same fashion as the male names. In the 1940 census Quiroga and its ranchos had 1,947 females who possessed 318 different names. The number of different names actually is somewhat smaller, since such names as Paula, Paulina, Paublina, and Pabla are obviously derived from a common source, as are many others, such as Felisa, Felicitas, and Felicianita. We have considered certain variant forms as the same name because the slight change in orthography is more apparent in the way the census taker or the clerk of the civil register has spelled the name than in the local pronunciation of the name. Among such variants, which we considered as one name, are: Amalia and Amelia, Catalina and Catarina, Elena and Elana, Emilia and Emelia, Ester and Esther, Sara and Sahara, etc. The most common female given name is María, which appears alone in 127 cases and in combination 187 more instances. What was said of José holds true for María. Since it is an exceedingly common name, quite often the María portion is used only on formal occasions, and the individual commonly will be known as Guadalupe, Carmen, Salud, Jesús, Concepción, etc. In many cases the María is lost shortly after baptism and is not used on any occasion. Probably several scores of individuals who are listed only with such names as given above were baptized with an initial María. It is likely that technically or legally at least half of the females in Quiroga possess the name María. When abbreviated, María appears as "Ma.," and this usage is quite common. In second place is Guadalupe or María Guadalupe; and the third place is held by Carmen or María del Carmen. Among women Jesús and María Jesús are far less popular than Jesús and José Jesús are among the males. We noted two instances of females with names which commenced with the initial "J." (J. Ignacia, and J. Socorro). In these cases the "J." probably stands for Jesús and not for José, as is invariably true among the males.

In the following tabulation are listed, in order, the most popular female baptismal names in the Quiroga area. If only one number appears after

the name, that name was found only in the simple form. A second number indicates the number of cases in which that name appears in combination with some other name, most commonly with María, and in a few instances with Ana, Jesús, and Luz.

Female baptismal names

1. María.....	127+187	49. Ana.....	10+1
2. Guadalupe..	73+14	50. Aurelia....	10
3. Carmen.....	53+18	51. Ignacia....	10+1
4. Teresa.....	53+2	52. Julia.....	10
5. Juana.....	50	53. Leonor....	10
6. Salud.....	48+15	54. Melania....	10
7. Consuelo....	42+1	55. Anita.....	9
8. Esperanza...	37	56. Carlota....	9
9. Ma. Jesús...	36	57. Mercedes...	9+4
10. Jesús.....	35+38	58. Paula.....	9
11. Ester.....	27+1	59. Rosario....	9+2
12. Josefina....	27	60. Tránsito...	9
13. Sara.....	25	61. Virginia....	9
14. Concepción..	24+15	62. Clotilde....	8
15. Antonia....	23	63. Gracia.....	8+1
16. Josefa.....	23	64. Ramona....	8
17. Margarita...	22+1	65. Refugio....	8+1
18. Luisa.....	22+11	66. Rosa.....	8+1
19. Dolores....	21+7	67. Zenaida....	8
20. Francisca...	21+2	68. Amparo....	7
21. Soledad....	21+4	69. Angelina...	7
22. Isabel.....	19+6	70. Celia.....	7
23. Socorro....	19+7	71. Irene.....	7
24. Diega.....	18+2	72. Librada....	7
25. Ma. Carmen..	18	73. Ma. Dolores..	7
26. Ángela....	17	74. Natividad...	7
27. Petra.....	17	75. Susana....	7
28. Catalina....	17	76. Victoria....	7
29. Amalia....	16	77. Delfina....	6
30. Elena.....	16	78. Eulalia....	6
31. Luz.....	16+1	79. Genoveva...	6
32. Trinidad....	16+11	80. Jovita....	6
33. Aurora....	15	81. Lucía.....	6
34. Ma. Concep- ción.....	15	82. Ma. Isabel..	6
35. Ma. Salud..	15	83. Ma. Socorro..	6
36. Ma. Guada- lupe.....	14	84. Marcelina...	6
37. Rafaela....	14	85. Nicolasa....	6
38. Beatriz....	13	86. Tomasa....	6
39. Emilia.....	13	87. Abigail....	5
40. Elvira.....	13	88. Adelaida....	5
41. Herminia...	13	89. Elisa.....	5
42. Magdalena...	13	90. Enedina....	5
43. Lorenza....	12	91. Gregoria....	5
44. Ma. Luisa...	11	92. Herlinda...	5
45. Ma. Trini- dad.....	11	93. Matilde....	5
46. Ofelia.....	11	94. Micaela....	5
47. Raquel....	11	95. Modesta...	5
48. Agustina...	10	96. Natalia....	5
		97. Rita.....	5
		98. Sabina....	5

The incidence of the remaining names was: 21 names, 4 persons; 19 names, 3 persons; 62 names, 2 persons; and 125 names, one individual. María, in all listed combinations, comprised about 16 percent of the female population. The first 12 names (including Ma. Jesús, but no other combinations with María) covered somewhat more than 31 percent of the females; the first 21 names comprised a little more than 41 percent; and the top 32 names comprised approximately one-half of the females. It will be noted that, although the male and female populations are comparable, and though there are a few more male names than female, there is a greater dispersal of females in the names having an incidence between 5 and 10 persons.

COMPARISONS

Comparisons with sixteenth-century female baptismal names are not reliable, since we obtained only 32 names covering 231 women from the *Catálogo de Pobladores de Nueva España*. (O'Gorman, 1945). The leading names were María, Isabel, Francisca, and Ana, which comprised more than half of the women mentioned. Other names, in order, were Catalina, Juana, Leonor, and Beatriz, which, with the first 4, comprised more than three-quarters of the women listed. From this scanty material it seems that only María and Juana have maintained their ancient rank, although all eight sixteenth-century names are represented among the first 50 in Quiroga as of 1940. The outstanding development is the addition of the strictly religious Christian name of the type exemplified by Guadalupe, Carmen, Salud, Consuelo, Jesús, and the like. This accords with the trend determined for male names.

Other comparisons are afforded by the study of the 323 girls born during the period 1941-44, and the names of the 226 women who were mothers in 1945. In the following tabulation we present the leading names for all females in 1940, females born 1941-44, and mothers in 1945:

Census of 1940	1941-44 births	1945 mothers
1. María.....	Ma. Guadalupe....	María.
2. Guadalupe....	María.....	Juana.
3. Carmen.....	María Salud....	Ma. Jesús.
4. Teresa.....	Margarita.....	Ma. Guadalupe.
5. Juana.....	Ma. Socorro....	Ma. Carmen.
6. Salud.....	Ma. Carmen....	Ma. Concepción.
7. Consuelo....	Josefina.....	Esperanza.
8. Esperanza...	Sara.....	Francisca.
9. Ma. Jesús...	Ma. Jesús.....	Ma. Salud.
10. Jesús.....	Ma. Teresa....	Ma. Teresa.
11. Ester.....	Esperanza....	Ma. Dolores.
12. Josefina....	Luisa.....	Ma. Socorro.

There is apparent very little change. The absence of simple Carmen, Guadalupe, and Jesús in the last two columns represents merely the more meticulous attention to detail of the secretary of the civil register than that exercised by the census takers. Possibly Juana is being replaced by Margarita in the youngest generations, but all names from the 1941-44 and 1945 lists are to be found among the more common names in 1940. As was mentioned for the male names, there is apparent very little tendency to name females after popular movie stars, heroines of novels, and the like. The female names of Quiroga can be compared with those in the United States, where presumably the most popular names are Mary, Annie and Ann, Margaret, Elizabeth and variants, Catherine, Sarah, Nellie, Frances, Lillian, and Rose.

ANALYSIS OF GIVEN NAMES

FEMALE NAMES

Female given names fall more readily into classes than do the names of males. The most important class includes all names derived from Mary the Mother of Jesus the Christ. During the past 12 centuries the cult of Mary the Mother of God has ramified enormously within Christendom. This has been most apparent within the Romance or Latin Roman Catholic countries, and especially during the past four centuries. An outstanding development has been the great increase in the festivals and popular devotions concerned with Our Lady (Nuestra Señora) in her various associations, attributes, special shrines and effigies, etc. Biblical and apocryphal events and more recent events and apparitions have given rise to dozens of manifestations of Mary the Great Intercessor. These various impersonations, aspects, representations, avatars, advocations, or manifestations of Mary are the source of a majority of Christian female names in Quiroga and probably throughout Mexico and Latin America. The most important is María (Mary) herself; followed by (María) Guadalupe—associated with a shrine in Spain, and with the leading shrine in Mexico, at the site of the apparition of the Brown Virgin, patroness of Mexico and of Latin America. In third place is (María del) Carmen—associated with the festival of Our Lady of Mount Carmel. Other leading forms include María as Nuestra Señora of: Health or Salvation (Salud)—asso-

ciated with the most miraculous *santo* in the Pátzcuaro Basin, that of N. S. María de Salud in a Pátzcuaro temple; Consolation (Consuelo); Hope (Esperanza)—connected also with the nearby shrine of N. S. de Esperanza in Zamora; Jesús—Mary as the Mother of Jesus or God; Immaculate Conception (Concepción)—associated with the patroness María Santísima, N. S. de la Purísima Concepción, of all Indian hospitals in Michoacán including the church of the former hospital in Quiroga; Sorrows or Dolours (Dolores); Soledad—connected with the shrine of N. S. de la Soledad in Mexico City; Help to Christians and Perpetual Succour (Socorro); Light (Luz), probably influenced by the shrine to Nuestra Madre de Luz in León of Guanajuato State; Mercies (Mercedes); the Holy Rosary (Rosario)—based on the prayers for victory at Lepanto in 1571; Translation or Assumption (Tránsito); the Blessed Virgin Mary (Virginia); Grace (Gracia); Refuge for Sinners (Refugio)—associated with the shrine of N. S. del Refugio in Puebla; Protection or Favor (Amparo); Nativity (Natividad); Victory at Lepanto (Victoria); Peace (Paz); Prodigies (Prodigios); Pillar (Pilar)—from the shrine in Saragossa; Purity or Piety (Piedad); Purification or Candlemas (Candelaria); Miracle of the Snows (Nieves); etc. Such forms, and María in combination with such names as Teresa and Luisa, comprise the names of at least one-half of the females in the Quiroga area.

A second class comprises names that are essentially the feminine equivalent of the names of masculine saints. Occasionally they are saints' names in their own rights. The leading representatives of this class are Juana, Josefina and Josefa, Antonia, Luisa, Francisca, Diega, Petra, Rafaela, Lorenza, Agustina, Ignacia, and Julia. Closely related, and not far behind in representation, is the class containing noted female saints. Santa Teresa, possibly the greatest Spanish female saint, has given her name to the greatest number. Far behind are such as Margarita, Catalina, Amalia, Elena, Beatriz, Emelia, Herminia, Aurelia, and Melania. A fourth class is made up of biblical names, commonly considered as saints. Examples of this class are such names as Ester, Sara, Isabel, Raquel, Magdalena, Ana and Anita, Susana, and Abigail. A fifth class includes such as Ángela and Angelina, Trinidad, Aurora (from a mass on Christmas Day), Cruz, Sacramento, and Gloria (stressed in the Doxology)—all per-

taining to religious concepts and ceremony. In addition, there are scattered representatives of such classes as pagan goddesses (Elvira), qualities and substantial concepts (Ofelia, from the Greek for "benefit"), a romantic Tarascan heroine (Eréndira), etc.

MALE NAMES

No one source dominates the male Christian names as does Mary among the female names. However, Mary's counterpart and husband Joseph (José) does rank in first place with about one-tenth of the total. This is undoubtedly the work of the Franciscan friars, who also espoused the cults or devotions and festivals of the Holy Name of Jesus and of the Blessed Trinity. Although Jesús is in a strong second place, the names belonging to the Saviour group do not bulk importantly. The other names of this group include Salvador, Manuel, Trinidad, Domingo, and Ascensión. Possibly there should be included the reputed names and titles of the Three Wise Men—Melchor, Santos, Gaspar, Reyes, and Baltazar (this last name is not current in Quiroga excepting as a surname). All of this group comprise only about 15 percent of the names. Commencing with Luis, Diego, and Francisco (in third, fourth, and fifth places) we have the most important group—that of major saints. Next in importance in this group are Antonio, Juan, Pedro, Ramón, Leopoldo, Isidro, Carlos, Felipe, Santiago, Gregorio, Vicente, Nicolás, Andrés, Lorenzo, Agustín, Leonardo, Florentino, Felix, Fidel, Ignacio, Tomás, Basilio, Marcelino, Marcial, Marcos, and Primo. This group comprises about 50 percent of the total. It is noteworthy that Franciscan saints dominate; e. g., San Luis de Tolosa, San Francisco de Asís, San Antonio de Padua, San Juan Capistrano, San Pedro de Alcántara, and San Diego de Alcalá—the patron saint of Quiroga. Also, Spanish or pseudo-Spanish saints are important, such as (in addition to several of the above) Santiago (St. James the Greater), the patron Saint of Spain, San Isidro the Laborer (patron saint of Madrid), and several by the name of Ramón and Vicente. The Apostles, Evangelists, and the doctors of the church are not well represented other than Santiago mentioned above, Gregorio, Andrés, Agustín, and some of the Juans, Pedros, Felipes, and Tomases. Closely related to this group are two others, the first of which comprises personages

from the Old Testament who are nominal saints; e. g., Ismael, Daniel, David, Samuel, Eliseo, Rubén, Abel, and others in descending order. This group comprises about 5 percent of the male population. The other group is made up of names that are inherently Spanish-Germanic, although several of the names were possessed by recognized saints. The leaders in this group, which covers about 8 percent of the males, are Alfonso, Enrique, Arturo (possibly Celtic in origin), Ricardo, Alfredo, Rodolfo, Adolfo, Alberto, Eduardo, Arnulfo, and Roberto. There remain two major distinct groups. One, which comprises about 5 percent of the males, contains the angels and archangels—Rafael, Miguel, Ángel, Gabriel, and Serafín, etc. The other, which covers about 5 percent of the males, embraces names connected with the Virgin Mary, e. g., Guadalupe, María, Refugio, Carmen, Encarnación, Socorro, Dolores, Natividad, Salud, and Joaquín (the father of Mary).

To stress the importance of the local Franciscan influence we should mention that the best *santos* preserved in the churches and chapels of Quiroga are those of San Diego de Alcalá, San José, San Francisco de Asís, San Antonio de Padua, and N. S. de la Purísima Concepción. Also there are, or have existed, chapels dedicated to San Antonio, San Vicente, San Miguel, et al.

COMBINATIONS

It has been mentioned already that José and María are used widely in combinations. Some of these combinations are mandatory; that is, Jesús should never appear without José or María, and the same is nominally true for many other names, such as Guadalupe, and Carmen. Other combinations are favorites, although not required, as in Ana María, Rosa María, María Isabel, María Luisa, María Teresa, María Elena, María Eugenia, María Cristina, and María Ester for girls; and José Luis, José Antonio, José Francisco, and rarely such as Juan Manuel, Victor Manuel, and Pedro Antonio for boys. Occasionally a tripart combination such as José María Concepción will be used. There is a general feeling in the Roman Catholic church that the names of non-saints (such as Abigail, Celia, Delia, Elvira, Eloisa, Ester, Ofelia, Raquel, Alfredo, Baltazar, Gaspar, and Gustavo.) should be given only in connection with the name of some saint. This attitude was not noted in Quiroga.

NAMES LACKING

In view of occurrences in some other parts of Mexico there are some interesting lacks and representations. Among male names lacking or represented by only one individual are Aaron, Abelardo, Anselmo, Baltazar, Benjamín, Blas, Clemente, Conrado, Edmundo, Ernesto, Gil, Gonzalo, Horacio, Jacobo, Lucas, Mateo, Othón, Raimundo, Ramiro, Rodrigo, Ruperto, Sebastián, Simón, Valentín, and Victor. Relatively poor representation was found for names such as Ignacio (8), Tomás (8), Marcos (7), Fernando (6), Lázaro (6), Gabriel (5), Jorge (5), Julio (5), Melchor (5), Pablo (5), Roberto (5), Domingo (4), Esteban (4), Pascual (4), Patricio (4), Rubén (4), Bernardo (3), Cruz (3), Hilario (3), Martín (3), Matías (3), Timoteo (3), Alejandro (2), Ambrosio (2), Cipriano (2), Cosme (2), Gaspar (2), Hipólito (2), and Julián (2). Among female names lacking or represented only by one person are Ágata, Alejandra, Bárbara, Benita, Berta, Carolina, Clara, Constancia, Cristina, Enriqueta, Eva, Inocencia, Leticia, Lucrecia, Mariana, Prudencia, and Ursula. Relatively poorly represented are Ramona (8), Susana (7), Victoria (7), Tomasa (6), Adelaida (5), Gregoria (5), Matilde (5), Micaela (5), Natalia (5), Paz (5), Felipa (4), Inés (4), Rebeca (4), Sofía (4), Dominga (3), Eugenia (3), Manuela (3), Marta (3), Camila (2), Cecilia (2), Eloisa (2), Evangelina (2), Florencia (2), Gertrudis (2), Gloria (2), Laura (2), Monica (2), and Teodora.

EQUIVALENTS

In Quiroga usage most of the names have both masculine and feminine forms, to an extent much greater than obtains in the United States. Examples from the more common names include:

Masculine:	Feminine:
José.	Josefa, Josefina.
Mario, José María.	María.
José Jesús.	María Jesus.
José Guadalupe.	María Guadalupe.
Luis.	Luisa.
José del Carmen.	María del Carmen.
Diego	Diega.
Francisco	Francisca.
Juan.	Juana.
Rafael.	Rafaela.
José Salud.	María Salud.
Salvador.	Salvadora.
Antonio.	Antonia.
Pedro.	Petra.
Manuel.	Manuela.
Ramón.	Ramona.

One can generalize that nearly all masculine names have feminine forms, but the reverse is not so true. There are no masculine forms of Teresa, Ester, Sara, Isabel, and Elena, for example. Furthermore, of the various manifestations and associations connected with María, we found no instances in Quiroga of the masculine use of Ángeles, Esperanza, Estela, Gracia, Luz, Mercedes, Paz, Pilar, and Rosario. Nevertheless, it is confusing to encounter men called María, Carmen, Consuelo, Dolores, Inés and the like, and women with such names as Encarnación, Jesús, Sacramento, and Reyes.

NICKNAMES

The most common nicknames are the abbreviated or altered forms of the regular Christian names. Among those commonly heard were Pepe and Chepe for José, Chucho and Chucha for Jesús, Maruca and Maruja for María, Chon for Encarnación, Concha for Concepción, Lupe for Guadalupe, Pancho and Paco for Francisco, Lola for Dolores and Carlota, Nacho for Ignacio, Catuja for Catalina, and Belica for Isabel. A variant, and very common, are the diminutives, such as Antonito for Antonio, Dieguito for Diego, Anita for Ana, Frascuito and Currito for Francisco, Pepita and Chepita for Josefa (and equivalents for José), Mariquita for María, Lolita for Dolores, and Conchita for Concepción.

Descriptive nicknames, commonly used in the third person preceded by the article "el" or "la," are such as El Chino (The curly-haired one; not the Chinaman), El Gordo (The fat one), La Rubia or La Guera (The blonde or fair one), El Mocho (The one-armed one), El Cojo (The crippled one), La Loca (The crazy one), El Tuerto (The one-eyed one), El Flaco (The lazy or thin one), and El Tlacuache (The opossum). Also there are used such descriptive, and usually depreciative, substantives and adjectives as Chango (monkey), Chato (flat-nosed or flat-faced), Chapo and Chaparrito (shorty), Charro (dandy), Chamacito (kid, small boy), Chayote (tomboy), Gata (a female servant or working girl), Cabezón (dunce), Coyote (a sly or dishonest person), Cuatrojos (one who wears spectacles), Jamona (a big woman), Vieja (old woman), Tía (old woman; witch). Often two important individuals with the same names will have distinctive agnomens.

For example, two of the leading citizens of the area are Don Diego Fuentes Ayala and Don Diego Fuentes Aguilar. Although the compound names would differentiate them, the first is known as Don Diego (Fuentes) Palos (because he is tall) and the second is termed Don Diego (Fuentes) Tirimicua (because he owns much of the Tirimicua area). In addition there are three other Diego Fuentes in Quiroga, one in Caríngaro, and one in Sanambo, a total of seven in the area.

During the last 30-odd years forms of address have been democratized greatly. Where formerly only people of considerable wealth or position (as well as priests, doctors, and lawyers) were referred to or addressed as *señor* (mister) or *señora* (mistress) with the surname, or as *don* or *doña* with the Christian name, these terms are now used very widely. A number of terms are used to designate both real relationships and also close friendship, such as *cuate* (twin, chum), *cuñado* (brother-in-law, close friend), *compadre* and *compa* (gossip, very close friend), *hermano*, *mano*, *manito*, (brother, close friend). One's own teachers, any highly respected teacher, and master artisans or craftsmen are termed *maestro* or *maistro* (master). Most school teachers are called *profesor*, which was the most common term used in referring to the senior author's two assistants in Quiroga. The senior author was addressed by his students as *doctor*, and this term was widely adopted in Quiroga by our acquaintances, but it led to misapprehensions since commonly *doctor* in Mexico is applied only to physicians. The parish priest usually was addressed as *padre* or *mi padre* (father, my father). The few resident professional men, and those visiting Quiroga, commonly were addressed or referred to by their professional title; e. g., *Señor licenciado* or *Licenciado* (Mr. Lawyer, or Lawyer).

EDUCATION

HISTORY

Concerning formal education in Cocupao-Quiroga during the colonial period we know practically nothing. However, from what is known for the Michoacán area during that period we may assume that in this small Indian community all of the education was controlled by the Franciscan friars and consisted of the bases of the Christian religion as taught in catechism classes and rudiments of vocational training taught in the

hospital by Indian and mestizo members of the community. In addition there was the apprenticeship system in those *gremios* established in Cocupao and open by law to Indians and mestizos. In the colonial period Michoacán was noted for the excellence of its artisans, linguists, and theologians trained in the schools and seminaries of the Franciscans, Augustinians, and Jesuits. Cocupao had no notable educational establishments, but in nearby Tiripitio, Tzintzuntzan, Pátzcuaro, and Valladolid were a number of the outstanding and earliest educational establishments in Mexico.

This early tradition of education (fomented by such men as Bishop Quiroga, Fray Juan de San Miguel, and Fray Alonso de la Vera Cruz) may help to explain why a majority of the early intellectual and military leaders of the revolt against Spain were natives of the Province of Michoacán, and why in later years Michoacán has continued to supply more than her quota of leaders of thought and action. Also, it is noteworthy that Michoacán had a considerable number of schools during the so-called "dark ages of education" in independent Mexico from the time of Independence until the Madero Revolution. Possibly the status of education in Mexico during the nineteenth century has been depreciated by modern protagonists of the Revolutionary Socialist School who like to believe that there was little or nothing of cultural value for the proletariat. More likely there exists a real ignorance among contemporary historians and educators as to the status of education in Mexico outside of the largest urban centers during the nineteenth century. It is true that the majority of the people were illiterate, and that the Indians and the inhabitants of rural areas in general had little opportunity for schooling, but there was not an absolute lack of schools in rural and semirural areas. A case in point is Cocupao-Quiroga.

By about 1831 a school for boys, apparently supported by the municipality, was established in Cocupao. Our first definite statistics date from 1845 at which time the Escuela Pública de Niños de Primera Letras (Boys' Public Primary School) had one teacher (José María Castro), 45 pupils, and a curriculum consisting of orthoëpy (*ortología*), writing, spelling, arithmetic, history, and etiquette (*urbanidad*). By 1847-48 there were 90 pupils, and in 1848-49 the system of education followed was said to be a modification of the sys-

tems of Bell and Lancaster (British exponents of systems of monitorial mass education). This school continued until the period of French intervention, and was reopened in 1868 in an old chapel building with one teacher (José María Cázares). Apparently in the same year the first girls' public school was opened in Quiroga, with one teacher (Juana Prado). During the academic year 1868 the attendance in the boys' school ranged from 90 to 143, and in the girls' school from 115 to 171. At that time the annual salary of the teacher and director of the boys' school was \$400 and of the girls' school was \$300. During all of this period the schools in Quiroga essentially were municipal schools, since it is recorded in 1871 that the *ayuntamiento* could hire and fire the teachers, and had to provide the school buildings, equipment, and the salaries of the teachers. By State law of May 15, 1871, the *ayuntamientos* were empowered to use (for educational purposes) the funds derived from the *Derecho de Patente* (on livestock), the impost on liquor and tobacco shops, one-half *real* tax on every *fanega* of maize brought into town (a part of the *alcabala* system of taxation), and the 5 percent impost on all bets on cock fights. By 1881 there existed in the municipality the following primary schools: Quiroga—one public boys', one public girls', two private boys', three private girls'; Santa Fe de la Laguna—one public and one private boys'; San Jerónimo—one public boys'; San Andrés—one public boys'; Tzintzuntzan—one public and one private boys', one private girls'; and Atzimbo—one private boys' school. From 1881 to 1885 the total average attendance in public primary schools in Quiroga town was 178, and in the private schools the average was 143. If these official statistics are correct, an average of 321 children were obtaining primary education each year in Quiroga in the 1880's. A check of the 1940 census showed that 46 percent of the inhabitants of the town of Quiroga who were 50 or more years old had been to school and were literate, and 40 percent of the individuals 60 or more years of age were literate and had been to school. If the death rates for the schooled and the unschooled have been the same, this would indicate that at least 40 percent of the population of school age in the 1880's and 1890's in Quiroga went to school. Since the group of oldsters who had gone to school included nearly all of the occupations present in Quiroga, from *arriero* and *cohe-*

tero to *agricultor* and *comerciante*, it would seem that the educational facilities in Quiroga were open to everyone.

The public schools have had an uninterrupted history from 1868 to date excepting for the years 1870 and 1918 when apparently no schools were open in Quiroga. At some uncertain date in the 1930's the local municipal and State-supported schools were taken over by the Federal Government. Theoretically the period 1821-57 was dominated by municipal schools; from 1857 to 1935 all local public schools were State-controlled; and since 1934 the Federal Government has taken over most of the primary schools. In 1935 the boys' and girls' schools were combined for coeducational purposes under the name *Escuela Oficial Mixta*. At present this school, known as the *Escuela Primaria Federal "Miguel Hidalgo"*, is housed in a rented building facing onto the *Calzada Ramón Corona* just above the *Plaza Principal*. At a date we were not able to ascertain a State-supported school was established in the upper end of town, in the former chapel of San Miguel, for the benefit of the children of the agrarian *ejidatarios* of the Calvario district. This school has come under Federal control and is now known as the *Escuela Rural Federalizada "Redención"*. This latter school offers the first four grades of primary work, and commonly has one or two teachers. The semiurban school near the center of town always offers the first cycle of 4 years of primary work, and when there are students the second cycle of the fifth and sixth years of primary work is given. In Mexico, primary work consists of 6 years or grades, and secondary work covers 3 years. However, only primary schooling is given in Quiroga, and students who wish further training go to various State and Federal secondary, agricultural, and normal schools in Morelia, La Huerta (an *escuela central agrícola* near Morelia), and Pátzcuaro. The nearest normal schools are in Morelia and Zamora, and the State university (the oldest in Mexico) is in Morelia.

TEACHERS

The number of teachers has increased from the one director-teacher of the nineteenth century to a number which varies between six and eight at the present time (1945) in the Federal semiurban school. Since 1939 the group of teachers has included such specialists as musicians, dressmakers,

and carpenters. Because some of the teachers have ranked in influence only after the priests, we have compiled the list which follows:

Teacher-principals of the official boys' school

1877-92----	Cornelio Medina.
1893-1900--	Felipe N. Chávez.
1901-----	Pascual Carranza.
1902-3-----	Norberto S. Rocha.
1904-6-----	Vicente León de la Vega.
1907-9-----	Manuel E. Guerrero.
1910-11----	Victoriano Ruiz H.
1912-13----	G. Suárez.
1914-----	Antonio Pizarro.
1915-----	Ignacio de L. Pureco.
1916-17----	José Tránsito Acuña.
1918-----	No school.
1919-21----	Salvador Carrasco.

Principals of the boys' school

1922-26----	Efrén Gontis.
1927-28----	Eliseo Pérez.
1929-32----	Miguel Silva Díaz.
1933-34----	Antero M. Díaz.

Principals of the coeducational school

1935-----	Carmen López Barrera; Martín Alejandre.
1936-----	J. Jesús García Tapia.
1937-----	Andrés Barrera López.
1938-45----	Andrés Natividad Ríos.

Although religious schools (that is, schools taught by members of religious organizations) have been outlawed in Mexico for many years, the private schools that exist now in Quiroga are direct descendants of the earlier frankly Catholic private schools. The principal private school (Escuela Particular "Vasco de Quiroga") occupies part of an edifice in the Portal Allende, and is operated by six ladies who seem to be nuns in every respect excepting public garb. However, the Federal and State constitutions are not flaunted nearly so openly here as in some of the Indian communities of the Sierra Tarasca, where parochial schools have more pupils than the public schools.

LITERACY

The effectiveness of the schools in Quiroga is difficult to assess. One of the obvious criteria is percentage of literacy. Statements of literacy and illiteracy, when expressed in percentages, are not altogether reliable since the standards and ages involved vary from census to census. Commonly in the United States the percentage of literacy means the percentage of the population

10 years of age and older who can both read and write. Often in Mexico it is assumed that any person who has completed the first grade of primary school is literate, and also frequently persons who can read but who cannot write are included among the literates. Furthermore, the lower age limit involved is not always the same in the various census returns. This is partly because of uncertainty concerning the exact age of various individuals, and partly because of the laxness of the census taker who is often a local person with inadequate instruction concerning the techniques and purposes of the census. In the population censuses of 1900 and 1910 illiteracy was computed for the population 12 years of age and older; beginning with the census of 1921 the internationally accepted limit of 10 years has been used. However, in connection with the campaign against illiteracy (Campaña contra el Analfabetismo) which was initiated by law in August of 1944 and placed in execution in March of 1945, an attempt was made to reach all illiterate persons between the ages of 6 and 40. Apparently the census of illiterates made in the Quiroga area by the teachers and municipal authorities in 1945 was not consistent in its limits: in some sectors all illiterates above the age of 6 were listed, in others the lower limit was taken as the age of 10, and in some sectors only illiterates up to 40 were included. In our own census of 1945 we relied entirely upon our informants for the number of individuals in each family who could not read and write but whose age would imply the theoretical possibility. Presumably the illiterates in our census represent persons above the age of 9, but undoubtedly errors have entered into our returns. In table 31 statistics of various types give some indication of the schooling and literacy in the Quiroga area. It is apparent that numerous errors are present in the two above-mentioned censuses and in the distribution of population by ages. In the Villa de Quiroga we asked only for illiterates, so we have no figure on the literates. Theoretically the sum of the literates and the illiterates (2,107) should exceed the number of people 10 years of age and older in 1945 (2,902), but it does not even approach the figure for 1940 (2,720). Since the number of illiterates in the official census for 1945 is approximately the same as in our census (aided by one interpolation), although there is considerable difference

in details, and since the literates in the ranchos are identical (with the exception of Atzimbo), probably the error consists of not listing all of the literates in the town of Quiroga. This assumption is backed by an examination of table 32, which shows the literate persons as of the 1940 general census.

TABLE 31.—*Schooling and literacy in the Quiroga area*

Division	Population ¹					
	1940			1945		
	Above age 5	Above age 9	Total	Above age 5	Above age 9	Total
Villa Quiroga.....	2,364	2,135	3,009	2,618	2,278	3,161
Ranchos de Quiroga.....	700	585	890	773	624	998
Total.....	3,064	2,720	3,899	3,391	2,902	4,159

Division	Official 1945 illiteracy census		1945 census (author's)	
	Literate	Illiterate	Literate	Illiterate
Villa Quiroga.....	729	776	-----	688
Cuartel I.....	190	147	-----	115
Cuartel II.....	203	206	-----	206
Cuartel III.....	146	276	-----	234
Cuartel IV.....	190	146	-----	133
Ranchos.....	80	522	35	607
Atzimbo.....	70	68	25	113
Caríngaro.....	1	36	1	37
Icuácató.....	2	² (154)	2	154
Sanambo.....	6	196	6	237
La Tirimicua.....	1	33	1	42
Zirandangacho.....	0	35	0	24
Total.....	809	1,298	-----	1,295

¹ "Above 9" means age 10 and upward, and "above 5" means age 6 and upward. The distribution by ages is exact for 1940, but is based on 1940 proportions for 1945.

² This figure was supplied from the author's 1945 census.

TABLE 32.—*1940 census data on literacy*

Division	Individuals who can—		Illiterate (age 6 and older)	Illiterate (age 10 and older)
	Read and write	Read only ¹		
Villa Quiroga:				
Cuartel I.....	283	22	279	213
Cuartel II.....	288	21	403	326
Cuartel III.....	302	14	245	187
Cuartel IV.....	258	21	289	238
Total.....	1,131	78	1,216	964
Ranchos:				
Atzimbo.....	55	0	86	73
Caríngaro.....	0	0	49	40
Icuácató.....	7	0	197	166
Sanambo.....	15	0	212	170
La Tirimicua.....	4	0	60	46
Zirandangacho.....	0	0	16	11
Total.....	81	0	620	506
Villa Quiroga and ranchos.....	1,212	78	1,836	1,470

¹ Those who can only read are grouped with the illiterates.

It will be noted that the figures in table 32 also are not fully reliable, since the sum of the illiterates age 10 and older and the literates (which include some children under 10) should exceed the total population age 10 and older, but fails to do so (2,682 compared with 2,720). Nevertheless, the figures probably are accurate enough to give a percentage of about 54 for illiteracy in the Quiroga area in 1940. If we accept a round number of 1,300 illiterates for 1945, and a total of 2,902 in the age group 10 and older, the percentage of illiteracy in 1945 was about 44.8 percent. This figure can be compared with the national average of 48 percent as stated by Secretary of Public Education, Don Jaime Torres Bodet, in his speech of August 27, 1944. According to recent censuses the percentage of illiteracy in Michoacán has been: 55.14 in 1940, and 66.86 in 1930. The entire municipality of Quiroga has had illiteracy percentages as follows: almost 60 in 1940, and a trifle less than 69 in 1930.

The 1940 census data on schooling are shown in table 33.

Unfortunately we did not obtain the school enrollment for recent years in Quiroga. Probably it is considerably higher now than was indicated by the census data for 1940. In 1940 there were 556 children of ages 6 to 12, inclusive, who had never been to school, and there were 118 other children of that age group who had dropped out of school after some schooling (41 had taken the first grade, 42 had taken second-grade work, 21 had progressed through the third grade, 13 had finished the fourth grade, 1 had taken the fifth grade, and none had gone as far as the sixth grade). This situation, despite the fact that primary schooling is theoretically free and compulsory (for ages 6 through 14), is due chiefly to economic factors. The children cannot be spared from helping earn the family living, or at best usually the children go to school only the first 3 or 4 years while they are at ages too young to be of much economic importance. Although some of the school children, in 1940, were as young as 5 and others were as old as 15, most of them were 7 to 12 years of age.

The 31 individuals with more than an elementary education comprised 2 with 12 years past primary schooling (the physician, and the priest), 1 with 10 years of intermediate and higher education,

TABLE 33.—1940 census data on schooling in Quiroga and ranchos

Grade	Number of individuals completing indicated grade	Number of children in school
First.....	213	27
Second.....	306	42
Third.....	241	27
Fourth.....	265	6
Fifth.....	133	5
Sixth.....	101	1
Beyond primary grades.....	31
Total.....	1,290	108

4 with 6 years, 2 with 5 years, 3 with 4 years, 3 with 3 years, 11 with 2 years, and 5 with but 1 year. Many of these individuals (physician, priest, teachers, et al.) were not natives of Quiroga.

An inspection of the data given above shows that schooling and literacy are virtually nil in the ranchos (excepting Atzimbo which once had a private school), and that *cuarteles* II and III (which contain the Calvario district) have the greatest concentration of illiteracy. The ranchos with no school facilities are truly neglected, but the large number of illiterate children in Quiroga town (which has two public schools) shows that economic conditions must be improved and that a real desire for education must be inculcated before illiteracy will be drastically reduced. At present there are many families in which the parents or even the grandparents are literate while none of the children have been to school.

Quiroga has no public library, bookstores, stationery shops, or periodical stands. The nearest location of such establishments is Pátzcuaro, and a few miles more distant is Morelia, the best-equipped cultural center in the State. There are two Quiroga men who act as distribution agents for newspapers and several other periodicals. The average circulation is as follows:

Daily Mexico City newspapers:	Weekly magazines:
Excelsior..... 17	Policía..... 30
Novedades..... 10	Jueves de Excel- sior..... 25
El Nacional..... 5	Sucesos para Todos..... 15
Universal..... 2	Biweekly magazines:
Weekly newspapers:	La Familia..... 15
Restauración..... 52	Monthly magazines:
	Selecciones..... 17
	Mignón..... 2

Also, the journal of the Sinarquistas had a large "give away" circulation.

For a time in the latter part of the nineteenth century the Elizarrarás brothers ran a printing establishment in Quiroga, and novels of crime and adventure were among the items printed. For several years, about 1898–1900, the local tax collector (Aureliano Macías) published a newspaper, *El Paladín*.

LANGUAGE

At present Spanish (more precisely, Castilian) is practically the only language spoken in Quiroga and its ranchos. As has been indicated elsewhere, probably the inhabitants of the ranchos (with the exception of La Tirimicua) never had a language other than Spanish. However, Cocupao started as an Indian community in which only the Tarascan (Purépecha) was spoken, and throughout the colonial period there are references to the use of interpreters by administrators in their dealings with the natives of Cocupao. As has been shown, Cocupao gradually became a mestizo community, and concomitantly Spanish replaced the Tarascan language. Some time during the nineteenth century the bulk of the Tarascan-speaking population became concentrated in the San Miguel or Calvario district, and by the end of the century the last of the native speakers of Tarascan died. The State census of 1889 gave the population of the town of Quiroga as 3,407 "Hispano-Americanos" and 625 "Indígenas" (Indians). However, no information was given as to how many of these "Indians" could speak Tarascan. A number of the older men in Quiroga in 1945 stated that their fathers spoke both Tarascan and Spanish. Writing as of 1884, León states that the Indians of Quiroga spoke Spanish and poor Tarascan. According to our census of 1945 there were 6 individuals who spoke Tarascan as their mother tongue (these were bilingual Indians from the Tarascan pueblos of the municipality, and two of their children born in Quiroga), and one mestizo who had learned Tarascan while living as a child in Santa Fe. The census of 1940 showed two Spanish-speaking persons who also spoke Tarascan.

The foreign language understood by the greatest number of people is English. There were 45 individuals who admitted having some knowledge of English from having lived in the United States, and three others had studied English in school. However, only two individuals ever tried to converse with us in English, and it is doubtful if many

of the 48 people listed as having a knowledge of English actually have a working command of this language. The 1940 census showed but six individuals who could speak English. Also, in 1945, there were three individuals who could speak French, and two with a knowledge of Latin.

The Spanish or Castilian spoken in Quiroga is the type, often incorrectly referred to as the Andalusian dialect, which dominates most of Spanish America. More specifically, it belongs to the dialect which obtains over most of Mexico and Central America, and which is characterized by a large number of words of Mexicano (Nahuatl) origin, together with some words of Taino (Arawak) derivation. In Quiroga and the old Tarascan region in general there is a sub-dialect of Mexican Spanish which is differentiated by the comparatively large number of Tarascan words employed and by certain peculiar usages of Spanish words. So far as we know, no philologist has studied this Michoacán dialect which extends southward into parts of Guerrero and northward into Guanajuato. In this monograph there is space for only a few comments on the Michoacán dialect.

Spanish was introduced by conquerors, colonists, administrators, and religious, many of whom had acquired a number of Taino substantives in the West Indies, and a yet larger number of Mexicano nouns by reason of using Mexicano-speaking Indians as allies, servants, and interpreters. Consequent to the establishment of political, religious, and educational headquarters in the Mexicano-speaking area of the Valley of Mexico, the Europeans who settled in the province of Michoacán had only the Mexicano if they had any Indian language. As the Tarascans learned Spanish they incorporated as presumptive Spanish words many words of Mexicano and Taino origin which the Spaniards had adopted for material items which were lacking in the Old World. In this fashion such non-Tarascan and non-Spanish words as *guajolote* (turkey), *maíz* (maize), *chile* and *ají* (*Capsicum* pepper), *tabaco* (tobacco), *metate* (nether mealing stone), and *cacique* (chief-tain) were adopted by the acculturated Tarascans and the mestizos. In relatively few instances Tarascan words for items of general Mexican distribution were retained; e. g., *huarache* (sandal), *ciríán* (*Crescentia cujete*), *yácata* (temple mound or ruin), *ate* (sweet or sirup), *charanda* (red, as in

red earth), *tarecua* (a type of hoe or digging stick), *tacari* (Spanish moss), *chinapu* (obsidian), *xanamu* (a rock used in construction), *tiripu* (dodder), etc. In some cases a Spanish name was retained for a New World item (as *tortilla*, for the pancake of ground *nixtamal*, and *mano* for the handstone or muller); and in other cases a Mexicano name became current for an item with a perfectly good Spanish name available (e. g., *petate* for mat, *mecate* for rope, and *malacate* for spindle whorl and windlass). The reasons for such selection among the Spanish, Mexicano, Taino, Tarascan, and other languages have never been properly investigated. In summary, the various parts of speech are almost entirely Spanish, excepting the nouns and a few verbs. It would be difficult to decide whether more Spanish or Indian substantives are used in everyday speech. Certainly a majority of the plants, animals, and items encountered in a kitchen have Indian names. For example, *maíz* or *nixtamal* ground on a *metate* may be flavored with *chile* and made into a *tamal*, or cooked on a *comal* to make *tortillas* (Sp.), or else converted into *atoles*, *pozoles*, etc. Also, the farmer may set out for his *milpa*, carrying a *huaje* full of water, and with an *ayate* of *nequén* or *ixtle* in which he will bring back *ejotes*, *elotes*, or possibly *zacate*. There are only a few Indian verbs, such as *piscar* (to harvest) and the bastard verb *enchilar* (to make piquant with chile). There are corruptions of Spanish, most of them common to much of Mexico, but a few are more common here than over most of Mexico, e. g., *suidad* for *ciudad*. Also there are provincialisms such as the use of *harto* to mean "very" or "exceedingly," as in *harto hondo* (very deep).

One of the most interesting linguistic phenomena in the area is the definite line which can be drawn between the Spanish-speaking town of Quiroga and Tarascan-speaking Santa Fe de la Laguna within view to the west. This demarcation is all the more interesting because Santa Fe, San Jerónimo, and San Andrés are in the municipality of Quiroga, and their inhabitants must go to Quiroga to market, to pay taxes, to be inscribed in the civil register, etc. Furthermore, farmers of Santa Fe cultivate lands right to the "walls" of Quiroga town. However, it remains to be seen how long the retention of Tarascan can withstand the presence of a paved through highway,

bus lines, and a modern primary school. Most of the people of Santa Fe are bilingual, and it is merely a matter of how strong the local forces are which perpetuate the Tarascan along with the Spanish.

RECREATION

Probably the outstanding "recreations" are the religious-social festivals which have been mentioned previously. Also, the weekly markets, the fetching of water, and the washing of clothes at some spring or water hole afford the women and girls combinations of work and pleasure in which the pleasure is provided by the opportunity to visit and to gossip. The *campesinos* obtain the equivalent social pleasures going to and from work in the fields and woods. Furthermore, a great many of the men congregate in off-hours in the two pool halls and the four *cantinas*, and to a lesser extent in the barbershops. However, during our entire stay in Quiroga we saw relatively few drunks and very few loafers.

For no good reason Quiroga has neither a band nor an orchestra, and whenever such are needed the musicians must be brought in from Pátzcuaro or such communities as Teremendo, Ihuatzio, San Jerónimo, and San Andrés. Consequently, although Quiroga has a pleasant plaza with a kiosk, there is no formal *serenata* (evening promenade and opportunity for courting to the strains of occasional music). However, on many evenings and especially on Sundays there is some promenading in the Plaza Principal, punctuated by purchases at nearby stands and booths of foods, soft drinks, and ices. Most of the music heard in Quiroga is provided by the 6 *sinfonolas* (juke boxes), 62 radios, and 9 phonographs. The rate of increase of the radio is indicated by the fact that in 1939 there were only 28 radios in the entire municipality. There are four pianos in Quiroga, but as we made no attempt to census other musical instruments we can only surmise from observation that portable stringed instruments (violins and guitars) are the most numerous. Also, there are a few drums and flutes used in connection with religious ceremonies, although we were given to understand that flutists and drummers were brought in on occasion. These latter instruments can be considered as derived from Tarascan prototypes since wooden and skin drums, flutes, ocarinas, trumpets, and rattles were

important in pre-Conquest Michoacán, and the *Relación de Michoacán* mentions the existence of a chief of musicians. In addition to the ceremonial dances (Moros y Cristianos, Santiago, Toritos, etc.) there are a few public dances each year. However, most of the dances are comparatively small private affairs. The music played is a combination of native Mexican, European, and North American pieces. The younger people seem to like American dance music, although we feel that their own dance music is superior. It was interesting to note in 1945 that the "Raspa," which was currently popular, was considered to be of North American origin although we had encountered it years earlier in the American border states where it was considered a Mexican importation.

Competitive group sports are quite popular at present in Quiroga. Apparently this is a development since 1935. The town and schools of Quiroga boast of five soccer teams, four baseball teams, one basketball team, and one volleyball team. The leading football (soccer) team is the Vasco de Quiroga which more than holds its own in competition with teams from larger centers such as Pátzcuaro and Morelia. A football field has been cleared west of town, and matches open and free to the public are played here. Ball games, of course, are no novelty to the peoples of Michoacán, since the ancient Tarascans played a form of the *juego de pelota* which was so important prehistorically over central and southern Mexico. We were unable to locate a prehistoric ball court (*querehta* or *queretaro*) in the area, although one presumably was located near Ihuatzio, and in 1941 we saw one in the northwestern part of the State near Jiquilpan. The *juego de pelota* was outlawed in the early colonial period.

Traditional Spanish sports include bull fights, cock fights, and horse races. These were avidly followed in Quiroga during the nineteenth century and until the Madero Revolution. At present horse races are rare (the number and quality of the horses in the area have declined since the revolution), and the dirt track formerly used is now the paved street known as Las Carreras. Although real *corridas de toros* were held occasionally in the latter part of the nineteenth century, and a formal Plaza de Toros was erected on the Calle de la Reforma in 1900, at present there is only the rustic form of bull baiting which forms a

part of the *jaripeos* (something like a rodeo of the Southwestern United States) held in a plaza between Ramón Corona and La Llave. Formerly Quiroga had an elaborate arena or pit for cock fighting, but now the sport is in a decline and only occasional matches are held between local birds and with foreign birds in connection with the more important festivals and fairs of the region. There are several owners of fighting cocks in Quiroga.

Sporadic entertainment is provided by traveling theaters, carnivals, circuses, and other shows, although most of the traveling shows stop in Morelia, Pátzcuaro, and Zacapu, and consider Quiroga too small to justify even a one day or night stand. The schools, religious groups, and other local organizations put on a number of pageants and plays each year—mainly in connection with the leading religious and patriotic festivals. There is one cinema which was opened about 1941. It had ceased to function by 1944, but was reopened under new management in June of 1945.

Among the rustic pleasures are picnics, bathing parties, and boat rides. These were more indulged in prior to the revolution than at present. Since Quiroga lacks a pier and a bathing beach, the inhabitants must go to Pátzcuaro for boat rides, and to the lake beach at Chupícuaro near Santa Fe and to such thermal springs as Cointzio and Zinapécuaro for bathing. Occasionally groups go on picnic excursions to the fir-clad heights of Tzirate, to the extinct volcano of the Cerro Hueco (whose conduit and lateral tunnels are local curiosities), and to other nearby localities of scenic and other attractions. The leading sedentary games are dominoes, chess, checkers, and various card games. In a number of the stores are chess boards and sets, and it is not uncommon to see the proprietor and a friend, or a couple of erstwhile customers, engaged in a carefully played game. Both the frequency and the caliber of chess play seemed to be above what obtains in communities of comparable size in the United States.

HEALTH AND SANITATION

As mentioned previously, the annual mortality rate in Quiroga was 22.5 per thousand inhabitants on the average during the period 1937–45; and the chief immediate causes of death have been diseases of the gastrointestinal tract, respiratory diseases, and the “debility-anemia” group. The

evidence indicates that polluted water, insect-infested foods, improper housing and clothing, and nutritional lacks are the chief factors in propagating these diseases. The entire water-supply systems of the town and the ranchos require extensive expansion, repair, and improvement. Protection of foods from insects by screening of shops, markets, restaurants, and kitchens is practically lacking. Disposal of human wastes, garbage, and other refuse is quite primitive. The commonly dirt-floored and partially open kitchens are quite unhygienic. Most of the quarters in which people sleep either are closed too tightly at night for proper ventilation, or are entirely too exposed to drafts of cold night air. Most of the “beds” are comfortless and do not allow for real rest. There is a common tendency to bundle up too much about the head and chest (with serapes, rebozos, etc.), and to expose the lower portion of the body excessively. Malnutrition is evident, but only an extensive analysis of the local foods could determine the precise nutritional lacks.

Little by little practical education in the schools and the work of the private resident physician and of the Servicio Médico Social and the earlier Servicio Médico Ejidal and other governmental agencies are improving living conditions and the general health of the people of the Quiroga area. However, the physicians of the present as well as of the past have devoted most of their attention to curing the results rather than eliminating the causes of ill health. Since most of the causes are associated with deeply rooted customs and with the economic situation, it will take years of education and a marked rise in the standard of living before the general health of the population can be greatly improved. Figures are available on one factor involved, the sleeping accommodations of the Quiroga area. According to the 1940 census 2,916 people slept on some sort of bed (*cama*), 782 slept on a mat laid directly on the ground (listed in the census as *petate*, and *suelo*), 136 slept on a cot (*catre*, usually a folding framework of wood covered with canvas), and 65 persons slept on a *tapexco* (usually this term means a bed of canes or *otates* covered with a mat and often supported on two horses). Actually the bed or *cama* is frequently no more than some boards or canes supported by a couple of benches, stools, or horses. Also it is certain, from observation and from the general lack of water and of bathing facilities in

the homes, that personal cleanliness could be improved upon greatly. Although there is one public bathhouse at present (and one was recorded for Quiroga as early as 1878), its limited facilities are not taxed. In this connection it is interesting to surmise why the sweat bath (*temezcal* in Mexicano and *huringuequa* in Tarascan) has not survived in this portion of Mexico. It was known and used prehistorically by the Tarascans, and the sweat bath was a part of the various Indian hospitals in the colonial period.

Apparently the first resident physician was Dr. Octaviano Valdés (who had studied abroad), who took up practice in Quiroga as early as 1874, and by 1877 there was one resident pharmacist. Before the end of the century six other doctors had practiced in Quiroga, at least three of whom were natives of Quiroga who had obtained their education in Morelia (Dr. Francisco Calvillo, Dr. Victoriano León, and Dr. J. Jesús García Pita). Doctors León (ca. 1887–1910) and García (ca. 1890–1914) were the leading and often the only doctors in Quiroga for some 20 years prior to the revolution. From about 1914 or 1915 until 1936 there were no resident physicians excepting two about 1926–27. Beginning in 1936 there has been at least one physician in residence, and a total of six different doctors have lived in Quiroga between 1936 and 1945. The physician now in private practice is Dr. Arturo H. Rascón (degree from the Escuela Médico Militar), who first came to Quiroga with the Ejidal Medical Service 1939–41. In 1945 there was also Dr. Genaro Hernández Rodríguez serving a 5-month “internship” with the Social Medical Service.

FOOD, DRINK, AND DRUGS

Since we did not make a definite survey of food and drink habits in the Quiroga area, the following remarks (based on sporadic observations) are to be considered as approximations of the situation. Starch foods must comprise at least three-fifths by dry weight of all food consumed. The chief sources of starch are maize (more than half of all the food by weight), wheat, beans (kidney, horse, lima, etc.), bananas, rice, potatoes, and sweet-potatoes. Proteins are provided by meats (principally beef, followed distantly by pork, and then poultry), beans, fish, cheese, eggs, peanuts, pumpkin seeds, etc. Most of the calcium is

derived from the *nixtamal*, and smaller quantities are obtained from dried fish (*charal*) and various greens. Chile peppers are important sources of carotene, thiamine, riboflavin, niacin and ascorbic acid. Lard is the most used cooking fat, in addition to which some fat is introduced into the diet from various meats, milk, peanuts, avocados, pumpkin seeds, etc., Brown cane sugar is the chief form in which sugar is consumed and some sugar is obtained from the most popular fruits—various citrus fruits and bananas. Tomatoes, cabbages, pumpkins, onions, peas, and carrots predominate among the cooked vegetables. Chile peppers, tomatoes, onion and garlic, marjorams, coriander, and cinnamon are the most common flavorings. Maize *atoles*, coffee, milk, and chocolate are the leading nonalcoholic beverages.

Among the everyday dishes there are no novelties not found elsewhere in Mexico. Since there are adequate descriptions of all of the common Mexican foods available in cookbooks and ethnographic monographs (see Beals, 1946, and Foster, 1948), there is no point in discussing recipes. Maize enters into a majority of the prepared foods, which run the gamut from breadstuffs (tortillas, etc.), through stews (hominy in *pozole*), to parched corn (*pinole*) and popcorn, and various gruels and drinks (*atoles*). For some reason the Mexican Government has concerned itself with the number of people who commonly eat wheat bread (*pan de trigo*) either in addition to or to the exclusion of tortillas. According to the 1940 census there were in Quiroga and its ranchos 541 people who commonly ate wheat bread and 3,358 who did not. The proportion of wheat eaters has increased somewhat since the 1940 census. The number of dishes or foods consumed in a Quiroga family increases with the wealth of the family. The very poorest live most of the time on tortillas with chile and *atoles*, supplemented by gathered greens and fruits. The poor add beans and a few other items to the basic diet. Those somewhat better off add meat, fish, and wheat bread and a number of vegetables, fruits, flavorings, etc., and so on up progressively. Contrary to popular opinion in the United States, tamales are not a common everyday food, and when tamales are eaten they usually do not contain a meat filler. Chile and other sauces, and bean paste are often used in tamales. The number of meals and the hours of eating vary greatly with wealth and occupation. The

number normally ranges from two to four, and the hours commonly are: a very light meal (often only *atole* and tortillas, or coffee and sweet rolls), known as *desayuno* (breakfast), eaten between 5 and 8 in the morning; a more substantial meal (commonly including tortillas, beans, and perhaps meat or eggs), generally designated as *almuerzo*, at about 10 in the morning; what is often the main meal of the day (*comida*) in the early or mid-afternoon between 1 and 4; and an evening meal (also known as *comida*, and as *cena*) sometime between 6 and 9. Most foods are prepared by boiling or frying. Since the variety of dishes is restricted for most families, there are comparatively few foods that are consumed only at some particular meal, e. g., steak may show up at breakfast rather than at dinner, and breakfast cereals are commonly lacking (other than the thin gruels or *atoles*). Where a number of dishes constitute the meal (true for only a minority of the families), these are brought to the table in separate courses—from soup to dessert. A sweet dessert usually is lacking. There is a wry saying that beans are “el plato de los pobres y el postre de los ricos” (the main dish of the poor and the dessert of the rich), and stewed beans are the most common dessert.

As mentioned, the leading nonintoxicating drinks are *atoles*, coffee, milk, and chocolate. The maize *atoles* (ground *nixtamal* mixed with hot water or boiled, and strained to various consistencies) are very numerous since dozens of items may be added for sweetening, flavoring, and color. Among the favored flavorings are cinnamon, chocolate, native plums and cherries, ground cacao husks and mamey seeds, and seed of the Peruvian pepper tree. The *atoles* undoubtedly constitute the national drink of Mexico, if quantity consumed and number of consumers are the criteria. Coffee drinking (most commonly black, often with the cold coffee extract added to boiling hot milk) has had a remarkable development in Mexico during the past one hundred years. In 1800 no coffee was raised commercially in Mexico and only a little was consumed in some of the larger cities; in 1823 the upper classes were drinking perhaps half as much coffee as chocolate, and coffee shops were to be found in the larger towns along stage routes; by the 1840's Mexico (including Michoacán) was producing enough coffee for local consumption, but the common people were as

yet not drinking coffee; after the 1860's coffee planting increased greatly (Mexico is now one of the top six or seven producers in the world) and coffee entered rapidly into the life of the common people with the exception of the very poorest. Now it is difficult to find a community in which coffee is not consumed. In Quiroga and its ranchos coffee ranks only after *atoles*. Drinking of milk (other than human) was introduced by the Spaniards. At present milk is fairly common, although the quantity consumed per capita is not large. Chocolate, an aboriginal drink, has never been common with the majority of the population because of its restricted cultivation and comparatively high cost. There are many other food drinks and cool soft drinks (among which Coca-Cola has had an enormous increase in popularity in recent years), but they do not compare with those mentioned above.

Much has been written about pulque as the national intoxicating drink of Mexico. It is not and never has been the principal alcoholic drink of the majority of the Mexicans. Prehistorically fermented maize drinks were more widely spread and were more consumed. At present in Quiroga there is a slight consumption of pulque in season, but a number of other alcoholic drinks are more important. The leading intoxicating drink in Quiroga and in all of Mexico at present is European-style beer, as distinguished from native beers made from maize. In the early 1820's there were no breweries in Mexico; now there are more than 20 large breweries, and beer of many types and prices is available in all but the most remote and smallest communities. Most of the beer consumed in Quiroga is in bottled form, from breweries in the Federal District, Orizaba, and Monterrey. Dark beers such as Corona Negra and XX are preferred, but there is a fair consumption of light Corona, Carta Blanca, etc. Wines are not important in Quiroga. However, the term wine (*vino*) is applied to the distilled product of the agave. This *vino de mescal* (which includes tequila, bacanora, and other mescals from specific areas) is not locally so popular as a number of drinks made by distillation of brown sugar, molasses, and cane juice. The most popular “hard” drink in Quiroga is *charanda*, a colorless drink of high alcoholic content made in one distillery in Uruapan from fermented brown sugar. However, the term *charanda* is commonly applied to similar drinks

other than the one with this trade-mark. There are a number of other intoxicating drinks (such as *garapiña* or *tepache* from pineapple juice, *colonche* or *telonche* from the juice of cactus fruits), but they are of minor importance. The whole matter of intoxicating drinks in this area and elsewhere in Mexico has been much confused by changes in nomenclature, both in time and in space. A whole monograph could be devoted to this subject alone.

Tobacco is easily the leading drug stuff consumed in the Quiroga area, although most of its present use is neither as a medicine (as in part of colonial times) nor as a ceremonial item (as in prehistoric times). Judging by the remains of pipes, the inhabitants of the Tarascan area were the greatest users of tobacco (at least in pipes) in Mexico prehistorically. At present there is no pipe smoking in Quiroga, and the leading use of tobacco is in cigarettes. During the nineteenth century cigarettes were made commercially in Quiroga, but now the majority consumed are imported from the great factories in Irapuato and Mexico City, and to a lesser extent from Zamora, Morelia, Guadalajara, etc. The poorest individuals still roll their own cigarettes, but such brands as Tigres, Luchadores, Faros, and Quintos are cheap enough for most smokers. The smoking population includes practically all adults (both males and females) and a large proportion of the adolescents. Many of the smokers, especially the women and the older men, light cigarettes by moving the cigarettes to the match (conditioned by lighting cigarettes from fires), and hold the cigarette cupped within the hand with the lighted end within (probably a habit induced by the need to eliminate unnecessary use of matches for relighting cigarettes that have gone out). Cigars are rarely smoked; and we saw no use of chewing tobacco or snuff. One booth or *estanquillo* (which also handled soft drinks) had the largest variety of cigarettes (about 18 brands including the more expensive and milder Belmont, Monte Carlos, Bohemios, and Virginias, and the more expensive and somewhat strong Alas, Casinos, Fragantes, Rialtos, Elegantes, Cumbres, Delicados, etc.), but the cheap and strong cigarettes mentioned earlier were handled in nearly every grocery store and *tendajón*. Small boxes of single and double-ended wax matches (*cerillos*) are most commonly

carried by smokers. For a pipe smoker these *cerillos* do not prove very satisfactory.

So far as we could tell there was little or no smoking of marihuana, and no use of *toluache*, *peyote*, opium, and the like. The most popular commercial drugs were of the aspirin family, such as Mejoral, Cafiaspirina, Roberina. In summary, the most popular stimulants and narcotics were tobacco, coffee, beer, and sugarcane *aguardientes*. In most cases these items were used with moderation.

DRESS

The dress is predominantly European, and very few items can be considered as of Indian origin although a number of European garments had their prehistoric Indian equivalents. The main differences in dress within the Quiroga area are conditioned by wealth and occupation rather than by habitat and race. The poorer people of Quiroga town dress about the same as do the majority of the inhabitants of the ranchos. There is evident more conservatism in dress among the men than women. This is illustrated by the fact that an Indian woman from Santa Fe or Tzintzuntzan can almost always be distinguished from the women of Quiroga by her garb, but a farmer or *campesino* dresses about the same whether he is from Sanambo, Quiroga, or Santa Fe.

Some idea of basic dress complexes can be obtained from the results of the 1940 census. In this census *traje completo* or *vestido completo* means that the men commonly wore coat and trousers (not necessarily matched), and the women usually wore a one-piece dress (anything from a "Mother Hubbard" to a well-fitted dress). *Pantalón* is used for the men and youths who habitually wear trousers but not coats. *Calzón* applies to the men and boys who usually wear the traditional white "pajama" trousers of white or unbleached muslin (*manta*). Apparently *enaguas* and *falda* were used synonymously and apply to the women and girls who wear some sort of skirt with a separate blouse. This combination is at present typically Indian and rural, although found among mestizas and whites and in urban areas. *Bata*, *camisa*, and *envuelto* are used for the various clothes (wrapper, shirt, swaddling clothes) worn by babies and small children of both sexes. *Overal* and *oberol* are used for the men and boys

who have taken over the overalls (with and without bib) so characteristic now of the unionized workmen in urban areas of Mexico. Footwear is divided into three classes: bare feet or no customary use of footwear (mainly women and children); sandals (*huaraches*) worn only by men and boys; and shoes (*zapatos*) of all types, worn by women, men, and some children. The 1940 census records only the diagnostic elements of dress given above, which are considered to be the usual everyday wear of the persons censused.

TABLE 34.—*Dress and footwear in the 1940 census*
DRESS IN THE 1940 CENSUS

Division	Traje completo	Pantalón	Calzón	Enaguas	Bata, etc.	Overa
Villa Quiroga:						
Cuartel I.....	321	201	102	60	17	-----
Cuartel II.....	399	224	139	75	16	4
Cuartel III.....	331	246	113	82	15	7
Cuartel IV.....	248	208	98	91	12	-----
Total.....	1,299	879	452	308	60	11
Ranchos.....	397	45	420	14	14	-----
Quiroga area.....	1,696	924	872	322	74	11

FOOTWEAR IN THE 1940 CENSUS

Division	Bare-footed	Sandals	Shoes
Villa Quiroga:			
Cuartel I.....	38	156	507
Cuartel II.....	78	194	585
Cuartel III.....	81	164	549
Cuartel IV.....	43	163	451
Total.....	240	677	2,062
Ranchos.....	122	398	370
Quiroga area.....	362	1,075	2,462

Since the 1940 census was taken the main change apparently has been an increase in the use of overalls by men and boys in town. We suspect the recorded large number of wearers of shoes. Probably all of the 2,462 owned shoes, but probably a considerable number of such owners (especially among the women) did not wear them commonly around home and only donned them to go "down town," or to town, or on festival occasions. The most common associations are: only men and boys wear *huaraches*, practically all of the wearers of *calzones* are shod with *huaraches*, and the some 200 other wearers of *huaraches* are derived principally from the *pantalones* group; only women and children commonly go barefooted, and most of the women who wear *enaguas* go barefooted; and the use of *calzones* tends to be concentrated in the ranchos and the Calvario

district, while *enaguas* are found principally in the Calvario district and among the poorer women elsewhere in Quiroga town.

A typical woman in Quiroga wears as her everyday garb a one-piece cotton print dress, cotton stockings, shoes, and a rebozo. The next most common combination is the foregoing minus the shoes and stockings. In third place is the colonial combination of blouse (with short sleeves more often than sleeveless) or calico waist, full calico skirts (less commonly full woolen skirts), rebozo, and bare feet. Only a few women wear silk stockings, or the black *mantilla* instead of a rebozo. On a few occasions some women and, more commonly, girls will wear the national galaday attire known as the *china poblana*.

The most common male attire consists of a straw hat, serape, white or colored blouse or shirt, dark-colored woolen or cotton trousers, leather belt, and either *huaraches* or shoes. In second place is the *campesino* combination of straw hat, serape, white blouse or shirt, colored *faja* or belt, white *calzones*, and *huaraches*. In third place is the urban or *catrín* combination of felt hat, suit or unmatched coat and trousers, leather belt, shirt—usually white, a tie on occasion, socks, shoes, and anything from a formal overcoat to a serape for protection against the cold. Khaki or buff-colored shirts, trousers, and jackets are popular among those with political or military background or aspirations. Blue overalls in combination with shoes or *huaraches*, felt hat or straw hat, white or colored shirt, and anything from a blanket or serape to a sweater or leather jacket, are becoming rather common in Quiroga as elsewhere in Mexico. The most common straw hat is of the low-crowned type made widely in Michoacán from the Pátzcuaro Basin to Sahuayo. The most popular serape is a locally made black serape decorated with red geometric figures. A few men own *charro* costumes, but only one man commonly wears his outfit, which is the relatively subdued and authentic costume of the rural gentleman of a generation or two ago and not the gaudy and silver bedecked costume of the city dudes which can be seen today in Chapultepec Park on Sundays.

HOUSE FURNITURE

We made little attempt to study house furnishings in the Quiroga area. However, from general

observation we believe that the following inventory of three houses in Quiroga is representative of what obtains in a majority of homes in the area. It must be kept in mind that perhaps a third of the homes, especially those near the center of Quiroga town, are much more elaborately furnished.

House No. 1

Cocina (kitchen):

- 1 *chimenea* (hearth or fireplace) of stones and mud.
- 2 sets of mud-covered *paranguas* (hearth stones).
- 1 *comal* (metal griddle).
- 2 metates with manos.
- 1 olla (jar) for *nixtamal*.
- 1 *tascal* (basket for tortillas).
- 1 small *cazo* (copper kettle).
- 1 large *cazo* (copper kettle or cauldron).
- 1 large olla for drinking water.
- 1 *canasto* (large basket).
- 1 *trastero* (combination of wooden pegs, shelves, and hooks) with small ollas, glass tumblers, *cazuelas* (earthen pans), *platos de sajonia* (chinaware), *platos de barro* (ordinary terra-cotta dishes), spoons.

Sala (combined living room and bedroom):

- 1 wooden bench.
- 3 wooden chairs.
- 1 water pitcher.
- Several brushes.
- 3 *petates* (bed mats).
- Images of saints hung on the walls.
- 1 *alacena* (wall cupboard) with china dishes.
- 1 chest with clothing, etc.
- 7 decorated *bateas*.
- 2 strands of dried cooked maize on the cob.

House No. 2

Cocina:

- 1 *chimenea*.
- 1 set of *paranguas*.
- 1 *comal*.
- 2 metates with manos.
- 2 *molcajetes* (mortars) with pestles.
- 1 olla for *nixtamal*.
- 1 *tascal*.
- 1 olla for drinking water.
- 1 *canasto*.

Cocina—Continued

- 2 *cazuelas*.
- 4 ollas of graduated sizes and many small ollas.
- 1 *batea*.
- 4 wooden spoons.
- 1 *molinillo* (chocolate beater).
- 1 *tinajera* (dish rack) with chinaware.
- 4 wooden tables.
- 1 *bote* (5-gallon tin can).

Sala or pieza:

- 2 wooden beds with *petates*.
- Wooden pegs on walls, with clothing.
- 2 censers and several pictures of saints.
- 2 axes.

House No. 3

Cocina:

- 1 *chimenea*.
- 1 set of *paranguas*.
- 1 *comal*.
- 1 metate and mano.
- 1 *tascal*.
- 1 large *cazo*.
- 1 large olla for drinking water.
- 1 *canasto*.
- 1 *cazuela*.
- Many small ollas.
- Chinaware.
- Glass tumblers.
- 1 large wooden spoon.
- 1 salt container.
- 1 aluminum sieve.
- 1 wooden bench.

Sala or pieza:

- 2 wooden chairs.
- 1 wooden bed.
- 2 clothing chests.
- 5 images of saints on the walls.
- Leather ropes for yoking oxen.
- 1 *morral* (carrying bag).
- 3 flatirons.

It will be noted that most of the furnishings have to do with preparing food. Furniture for leisurely moments (easy chairs, sofas, bookcases, etc.) is lacking. Possibly a truly typical house would have one small mirror, an oil lamp, brooms, and one bed chamber, besides the items mentioned above.

LEADING PERSONALITIES

So far we have described only the "body" of Quiroga. Some idea concerning the "soul" can be obtained from a list of the natives of Quiroga who have made some mark on the outside world. We do not pretend that our list is complete, but it certainly includes all of the most famous persons. During the colonial period Cocupao produced only

one famous or notorious person, Father Antonio Torres, who was born in Cocupao in the second half of the eighteenth century. We know nothing of his early life other than that he was the son of Salvador Torres and was vicar of Cuitzeo de los Naranjos (in Guanajuato) about 1810. He was not a very good priest and was credited with few

ideas, but he became a follower of Hidalgo and of Morelos, and soon was the scourge of southern Guanajuato and northern Michoacán. Father Torres is credited with burning Cocupao in 1811 (he set an example to the townspeople by firing his father's house) so that the royalists could not make use of it. In drunken play he was lanced to death by Captain Juan Zamora about 1817. Colonial Cocupao can claim one other person after a fashion, since the saintly Josefa Antonia de N. S. de la Salud y Gallegos (although born in Tzintzuntzan about 1688) spent most of her girlhood in Cocupao, and it was there that she dreamed that she must dedicate herself to Nuestra Señora de la Salud in Pátzcuaro, to which town she moved, and where she died in 1750 after a very religious life.

Little more is heard from Cocupao until it was surnamed Quiroga, and a number of its natives became noted liberal warriors and workers in the Wars of Reform and the French Intervention. Among the liberal patriots from Quiroga were Juan and Rafael Arellano, Francisco and Rafael Gaona, Rafael Garnica, José María Rojas, Francisco and Primo Serranía, Mariano and Miguel Torres, Joaquín Valdés, and José Jesús Villanueva. Of this group José Jesús Villanueva Barriga (born about 1827, died 1905) was the most famous. He began as a young man by joining the forces of the liberal governor and general, Epitacio Huerta. Villanueva fought for the Plan de Ayutla; rose to the rank of colonel in the war against the French; and early backed the cause of Porfirio Díaz in the troubled 1870's. By the time of his death he was the patriarch of one of the largest and most influential families in Quiroga; was one of the two or three largest landowners; owned two of the distilleries in the area; and was one of the most influential political figures in the State. His is the most imposing monument in the Quiroga cemetery. Rafael Garnica (presumably a native of Quiroga, although claimed by Coeneo) was one of the leading military figures produced in the area. During the period from the 1850's to the 1870's he rose to the ranks of colonel and general, and was one of the most trusted lieutenants of General Huerta (native of Coeneo) and General Pueblita (native of Pátzcuaro).

Among the more recent personalities from Quiroga have been:

Dr. Juan N. Navarro (born 1823, died 1904), claimed by both Quiroga and Morelia; surgeon, politician, poet; consul general of Mexico in New York City from the 1860's until his death.

Macario Torres (born 1853, died 1885); poet and politician, and a leading citizen of his adopted city and state—Valle de Santiago, Guanajuato.

Dr. Nicolás León (born 1859, died 1929); physician; first director of the state museum in Morelia, later affiliated with museums in Mexico City and Oaxaca; leading Mexican anthropologist of his time, great bibliographer, philologist, physical anthropologist, and founder of modern Tarascan studies. The Smithsonian Institution and the Instituto Nacional de Antropología e Historia in 1946 erected a bronze plaque to his memory on the house in which he was born on Zaragoza street in Quiroga.

Dr. Leopoldo Lara Torres (born ca. 1867, died 1940); Roman Catholic priest, and first bishop of Tacámbaro.

Dr. Joaquín Torres (born 1868, died 1916); physician and biologist, affiliated with the Sección de Biología General y Medical of the National Museum in Mexico City.

The brothers Ramón, Vicente, and Francisco Elizarrarás, who ran a printing establishment in Quiroga in the 1860's, and whose publications (especially novels) were widely read in Michoacán.

In addition to the above individuals, Quiroga has produced a number of lawyers, physicians, and clergymen, most of whom have exercised their professions in Morelia, various towns in Guanajuato, and in Mexico City. It is noteworthy that practically no native of Quiroga born during the past 50 years has acquired more than local fame or importance. It would seem as if the intellectual ambient in Cocupao-Quiroga from the 1830's to the 1880's (possibly because of the personalities of certain of the teachers, priests, and patriotic leaders) was much superior to what has obtained more recently.

In connection with the historical portion of our study of Quiroga we worked out genealogical tables for about a dozen families which had contributed most of the leading citizens for the past 90 years. A study of these tables showed that (a) the male line of the Torres family had contributed more outstanding persons than had any other one family, and (b) by the time of our study these various families were so intermarried that it was difficult to find an individual belonging to one of these families who could not claim some

relatively close degree of consanguinity with practically all the members of the other families. However, some of these families by 1945 had become extinct in Quiroga in the male line; and there were individuals who were unrelated except for marrying women of these families, since this group of leading families was far from endogamous. A brief example of the intermarrying of leading families is provided by the surnames of the

spouses of the children of Colonel J. Jesús Villanueva (by three wives):

J. Jesús Villanueva Tovar married María Soledad Villaseñor Ramos.

Federico Villanueva Ortiz married María Guadalupe Torres.

María Jesús Villanueva Ortiz married Crispín Villaseñor.

Rómulo Villanueva married María Rosario Ruiz.

CHRONOLOGICAL OUTLINE

- | | | | |
|----------------------|---|--------------|---|
| 1522-28/29.... | Spanish Conquest; Cortez <i>encomienda</i> . | 1854..... | General Pueblita pronounced for the Plan de Ayutla in Quiroga. |
| 1529-1810.... | Cocupao tributary to the crown. | 1854-61..... | Military disturbances caused by Plan de Ayutla, Ley Lerdo, 1857 constitution, and reform laws. |
| 1533-35..... | Visit of Quiroga; Pueblo Hospital de Santa Fe de La Laguna founded. | 1856..... | December 29, third greatest snowfall in local history. |
| 1534..... | Royal title granted to Pueblo de San Diego de Cocupao. | 1857-58..... | Modern water system installed in Quiroga. |
| 1545..... | Most deadly plague in history of the Pátzcuaro Basin. | 1858..... | January 1, fountain and statue of America inaugurated in Plaza Principal; June 19, strongest earthquake felt locally cast down upper member of bell tower of parish church. |
| 1576..... | Second most deadly plague in the Pátzcuaro Basin. | 1859-60..... | Civil register initiated; much opposition by local priest. |
| 1586..... | Visit of inspector-general Fray Alonso Ponce to Tzintzuntzan; Franciscan convent in Cocupao probably founded after this date. | 1860-64..... | Period of much construction of streets, bridges, and buildings; first street signs posted; <i>portales</i> Hidalgo, Allende, Matamoros completed (1861-62). |
| 1603..... | Congregation of San Diego, Sanambo, and Zirandangacho. | 1861..... | Quiroga expanded westward through acquisition of Plaza Vieja-Atzitzindaro district. |
| 1681-82..... | Measurement of the legal town site of Cocupao. | 1862-67..... | Period of French Intervention; in Michoacán November 1863 to February 1867. Virulent epidemics of typhus and typhoid. |
| 1692-96..... | Great famine in northern Michoacán. | 1863..... | May 1, squadron of cavalry raised forced loan in Quiroga to support Republican troops under Colonel Garnica. |
| 1742..... | Rough census of families by Villaseñor y Sánchez. | 1865..... | March 13, Republican troops under General Manuel García Pueblita, Colonel Rafael Garnica, and Colonel Jesús Villanueva attacked French troops under Captain Jaime Beguerisse, and after fighting from dawn to sunset gained possession of the town. |
| 1780..... | Second greatest snowfall in history of Michoacán; Tzintzuntzan secularized. | 1866..... | November 25, 20 prisoners were shot by Mexican Imperialist troops in Quiroga. |
| 1786..... | Most severe famine on record for Michoacán. Cocupao secularized. | 1867-73..... | Second important period of construction; many streets extended and paved; Plaza de los Mártires inaugurated; clock tower begun; bridges constructed in eastern part of town; water system expanded and fountain inaugurated in Plazuela de Mina. |
| 1803..... | Alexander von Humboldt passed through Capula and Pátzcuaro. | 1867-71..... | Reregistry of land titles for first time since 1843. |
| 1806..... | March 25, one of three most severe earthquakes in the area. | 1868-89..... | Francisco de P. Plasencia, parish priest. |
| 1811..... | Padre Antonio Torres burned Cocupao to the ground. | | |
| 1820/25..... | <i>Ayuntamiento</i> installed in Cocupao. | | |
| 1822..... | Lejarza estimate of population. | | |
| Ca. 1831..... | Public primary school for boys established. | | |
| 1833-36..... | Cholera epidemic; burying in churches prohibited; revolt. | | |
| 1837-46..... | No <i>ayuntamiento</i> in Cocupao. | | |
| 1842-53..... | Juan de Dios Torres parish priest. | | |
| Ca. 1843 or earlier. | Post office and tax collector's office in Cocupao. | | |
| 1845..... | April 7-8, destructive earthquake. | | |
| 1850..... | New cemetery inaugurated; great cholera epidemic. | | |
| Ca. 1850..... | Chapel of San Miguel built in El Calvario. | | |
| 1852..... | Cocupao raised in rank to Villa de Cocupao de Quiroga. | | |
| 1853..... | Quiroga area constituted an independent parish. | | |

- 1868----- Public school for girls opened; most exact census up to that time in Michoacán; bandit gangs led by Antonio Núñez and Evaristo Acevedo operated in Quiroga area.
- 1869-73----- Serious epidemics of smallpox and typhus.
- 1870-76----- Period of *pronunciamientos* and general disorder; schools closed in 1870; State imposed municipal government in 1870.
- 1870----- Rebellion in Michoacán; General Epitacio Huerta temporarily disbanded his troops, and colonel Villanueva and 150 infantry took refuge in Cerro Tzirate; general Corello and garrison occupied Quiroga for a time; bandit *gavilla* led by Marcos and Rafael García operated in Sierra Zinciro area to the west.
- 1870----- Law requiring registry of livestock and brands.
- 1871----- Pueblo Nuevo area in eastern Quiroga purchased from the Indians and divided into lots.
- 1872----- Ing. Antonio Linares ascertained elevation of Tzirate to be 3,340 meters. Only one two-story house in Quiroga; most of the roofs of *tejamanil*; before 1861 all roofs had been of *tejamanil*.
- 1873-77----- Legal conflict over Indian hospital La Guatapera.
- 1874----- First eucalyptus planted in Quiroga; Tzintzuntzan incorporated in municipality May 7. Cristero movement started August 2 under Socorro Reyes, who attacked Quiroga with his *gavilla* shouting "Viva la religión; mueran los empleados." General Rafael Garnica captured some of the Reyes band, who were placed in Quiroga prison; September 16 a rescue attack by the Cristeros was beaten off by Quiroga citizens led by Garnica and municipal president Antonio Leal.
- 1875----- Bandit and revolutionary *gavillas* attack Quiroga. State imposed municipal government.
- 1877----- First State exposition in Morelia; Quiroga sent numerous exhibits including locally produced silk, vegetable oils, medicinal plants, handicrafts, archeologic items.
- 1877-92----- Cornelio Medina, teacher in boys' public school.
- 1877-78----- Indian communities officially extinguished in Michoacán; last communal lands allotted in Quiroga.
- 1878----- Telegraph reached Quiroga; Plaza de Gallos installed in Plaza de la Constitución.
- 1879-84----- Water supply system renovated and expanded; fountains installed in Plazuela de Bravo and Plaza de la Constitución; epidemics of fevers and smallpox.
- 1880----- Chapel completed in Caríngaro.
- 1881----- February 7-8, heaviest snowfall in history; temperature down to minus 6° Centigrade.
- 1883-86----- Railroad completed Acámbaro, Morelia, Lagunillas, Pátzcuaro.
- 1884-1904----- Municipal palace under construction.
- 1887----- Daily steamship service begun between Pátzcuaro and Quiroga.
- 1889-90----- State imposed municipal government.
- 1890-92----- Plaza de los Mártires paved.
- 1892----- Famine year.
- 1893----- Telephone replaced telegraph in Quiroga.
- 1894----- Kiosk erected in Plaza Principal.
- 1895----- Clock installed on tower of repaired church of La Concepción of old Indian hospital; municipal offices moved into unfinished municipal building.
- 1896----- Metric system established by law.
- 1898-1900----- El Paladín published in Quiroga.
- 1900----- Plaza de Toros inaugurated; August 14, flood washed away the municipal slaughterhouse which was rebuilt 1901-02.
- 1901-13----- José Otilio Vivanco parish priest.
- Ca. 1902-03----- Vigas replaced in the *portales*; La Concepción burned.
- 1906----- First local electric plant; first *molino de nixtamal*.
- 1910-14----- Railroad constructed Pénjamo, Zacapu, Ajuno.
- 1910-28----- Period of revolution and anarchy; decline and partial abandonment of Quiroga. The Madero Revolution began, in Michoacán, in 1910 under Escalante in Santa Clara to the south.
- 1910----- Chapel of San Vicente de Paul inaugurated.
- 1911----- June 7, strong earthquake.
- 1915----- Request for restitution of lands made by Indians of Quiroga.
- 1915-18----- Reregistry of land titles; revaluation of rural property.
- 1917-18----- Revolutionary Villista chief Inés Chávez García and his gang raided Quiroga and burned some of the municipal records.
- 1923----- Water system repaired.
- 1925----- Present slaughterhouse inaugurated; first automobile passed through Quiroga.
- 1926-29----- Cristero disturbances; 1927-28, Cristeros under Ladislao Molina and Alfredo Elizondo raided Quiroga and burned records.
- 1929----- Provisional grant of *ejido* to Indians of Quiroga.
- 1930----- State imposed municipal government; in September Tzintzuntzan was withdrawn from the municipality.
- 1932----- Definitive possession of enlarged *ejido* granted; agrarian disturbances. Puente Jiménez constructed.

1933-----	Calzado Ramón Corona paved.	1939-----	Commercial chair industry established.
1934-----	Present kiosk in Plaza Principal constructed.	1940-43-----	Revaluation of real estate.
1935-----	Coeducational public primary Federal school established.	1941-----	Cinema opened in Quiroga.
1935-37-----	State imposed municipal government; small garrison in Quiroga.	1942-----	A dry cycle began in the Quiroga area.
1936-----	Federal medical services inaugurated.	1942-----	Federal electricity commission brought in electricity from Bartolinas plant near Tacámbaro.
1937-45-----	Agrarian domination of municipal government.	1943-----	Ashfall from Volcán Parícutin began to enrich the soil.
1937-38-----	Highway graded and oiled through Quiroga; first bus line established 1937.	1945-----	Quiroga raised from third to second fiscal rank for taxation purposes.
1937-----	Initiation and growth of Sinarquismo in Quiroga.	1946-----	Sector Popular and PAN in control of municipal government; water supply system under repair.
Ca. 1937-----	Jacarandas and casuarinas first planted in Quiroga.	1947-----	<i>Aftosa</i> affects cattle of the area.

CONCLUSION

This monograph has been confined primarily to the description of the land settlement, demography, government, and economy of the Quiroga area. Since it is published separately from the reports on the environment or natural landscape and history, conclusions pointing out relationships between the environment and development of human occupation of the area would be out of place. Until more detailed descriptive studies of other Mexican communities and municipalities are available it would be premature to reach any conclusions as to how typical or atypical is the area of our study. We have made a simple descriptive report whose chief values are two: (a) detailed information in selected fields, especially in municipal government and in land settlement, and (b) illustrations of the variety of sources of information available in and for a Mexican community and some of the uses to which this information can be put. Numerous thin spots and outright gaps occur in the material that we have presented. Some of these lacks represent material presented in the other two parts of our report on the Quiroga area; other weaknesses were recognized while we were in the field, but lack of time forced us to be selective; several lacunae were due to our lack of competence or interest; and, as is invariably the case when one has left the field and has begun to

work up the written report, we discovered that we had overlooked several desirable fields of investigation. Our personal conclusion for further work of this type is that a longer field period is advisable, and that a larger group of investigators representing a number of disciplines (e. g., pharmacology, medicine, agronomy, etc.) should be associated in the fieldwork.

Quiroga is lacking or poor in a number of material and cultural elements. Most of these lacks are characteristic of much of Mexico, such as insufficient water, poor soils and denuded lands, depleted forests, too few schools and teachers, low literacy and poor reading habits, poor sanitation and insufficient medical care, too few recreational outlets, and insufficient natural and social resources in general for a proper standard of living. It is to the great credit of the inhabitants that they are as happy, healthy, and progressive-minded as is the case. After our sojourn in Quiroga we have a very deep feeling of affection and admiration for this hard-working and hopeful people. In various parts of this report we have mentioned possible ways for improving or curing undesirable conditions. Most of these suggestions require both money and technical training for execution. The Mexican Government is working for improvement in many lines just as rapidly as financial and human resources allow.

EXPLANATION OF PLATES

PLATE 1

The Lake Pátzcuaro Basin from the air. View looking north and east from about 13,000 feet above the terrain. The city of Pátzcuaro lies near the lower right-hand corner. The upper body of Lake Pátzcuaro is the Seno de Quiroga, at the east end of which are the lowlands between Quiroga and Patambicho known as the Llano de Tzintzuntzan. The arrow points to the location of Quiroga in the cove back from the lake shore. The mountain dominating the central peninsula is Tariácuri, east of which is Cerro Yahuarato. Between these two mountains and near the shores of the Seno de Quiroga is Tzintzuntzan. The lake apparently beneath the clouds in the upper right-hand corner is Lake Cuitzeo on the Michoacán-Guanajuato boundary. The lowlands northwest of the Pátzcuaro Basin hold the upper waters of the Río Angulo-Río de la Patera-Zacapu drainage system. All of the *municipio* of Quiroga is visible in the crescent area between Lake Pátzcuaro and the highlands culminating in Tzirate (the mountain mass north of the upper arm of the lake), together with the small part of the municipality which lies outside of the Lake Pátzcuaro drainage to the east of Tzirate.

PLATE 2

The highland ranchos of Quiroga. View northward. A portion of the rancho Sanambo is in the extreme lower right-hand corner. The large field-topped hill just left of center is the Cerro Azul, and the smaller hill with a rectangular field on top just to the right of center is the Cerro Irauco. The large mass on the left margin is the Cerro Tzirate. Just below the X at the east side of the dark-colored fan-shaped lavaflow is the rancho Icuácató. The road from Chucándiro to Quiroga can be traced from Icuácató, along the margin of the lavaflow, down to the *plan* and *joya* and rancho of La Tirímicua (XX), and off the plate at the left where it skirts the Mesa de Santiago and starts to descend to Quiroga. The XX mark the location of rancho Caríngaro. The light-colored areas in the middle and foreground represent pastures, cut-over lands, and cultivated fields. The dark lines that wander over the light background represent bands of vegetation—along roads and paths, and along arroyos. The northeastern boundary of Quiroga against the municipality of Morelia has been inked in for a short distance on either side of the volcanic cone above Capula.

PLATE 3

The Villa de Quiroga from the air. The Villa de Quiroga is the large settlement in the lower part of the plate. The Pueblo de Santa Fe is at the top. At the second curve in the highway near the left margin (X) is the rancho Patambicho, and near the bottom margin and a little left of center (XX) is the rancho Zirandan-gacho. The Cerro Huarapo is the hill between

Quiroga and the lake. The compound delta of the arroyos del Salto and del Pueblo Nuevo is quite evident at the toe of the lake. The nearly straight tree-dotted road which extends left from Quiroga toward the lake (just below the Cerro Huarapo) is the Calle del Muelle or Embarcadero, and forms part of the boundary between Santa Fe and Quiroga.

PLATE 4

- a, View taken from cultivated field on slopes of Cerro Azul, about 500 meters above the surface of the lake. The central area is occupied by the lower part (*plan* and *joya*) of the hanging valley of La Tirímicua. Some of the house-groups of this disperse rancho are visible. A portion of the lake plain is visible. Quiroga is hidden by the hill (Cerro de la Muñeca) just beyond La Tirímicua. The peninsula in the background is that of Tariácuri or Tzintzuntzan.
- b, View from the lower slopes of the Cerro de la Muñeca (about 70 meters above the lake). The eucalyptus and cypress trees of the cemetery dominate the middle foreground. The clock tower of La Concepción church is outlined against the Cerro Huarapo.

PLATE 5

- a, View slightly north of east of the Villa de Quiroga nestled in its corner or *rincón*. Taken from the Cerro Huarapo. The highest mountain in the background is the Cerro Azul. To the right of the Cerro Azul is the Cerro Irauco; and below and to the left is the Cerro de la Muñeca. The foreground is occupied by a portion of the upper lake plain. The road crossing the middle foreground marks the limits between the Villa de Quiroga and the Pueblo de Santa Fe.
- b, View northwest over the Villa de Quiroga from the Cerro de la Cruz. The main paved highway from Mexico and Morelia enters from the right in the foreground. The slight angle in the highway marks the center of town and the juncture of the Pátzcuaro highway (which comes in from the left) with Federal highway No. 4 (Mexico-Guadalajara). The nearer limb of the highway, from the curve to the center of town, is the Calle de Benito Juárez, and the farther continuation is the Calle de Zaragoza. The largest structure to the left of the highway is the parish church. The broad street to the right of and parallel with Benito Juárez is the Calle de Morelos. The mountains in the background form the northwestern limits of the Pátzcuaro Basin.

PLATE 6

- a, View down Calle Benito Juárez, decorated with colored paper streamers on the Día de la Cruz, May 3. The houses on the left side of the street have uniform facades constructed by the Government after the street was widened by cutting off the front portions

of houses on this side. The painting of the lower portion of the whitewashed fronts with various colors (red, brown, blue, etc.) is shown in all three views on this plate.

- b, Food *puestos* at the T-intersection of the highways to Guadalajara (straight ahead down Calle Zaragoza) and Pátzcuaro (to the left down Calle Nacional). *Pozole*, *refrescos*, stewed chicken, and roast pork are for sale in the *puestos*. The three seated women are *tortilleras* with tortillas for sale in the *tascales*. They are dressed in the full calico-print dresses and rebozos characteristic of the poorer women. The crossed sticks above the middle doorway were placed there to hold some paper decorations which have long since blown away.
- c, View down the Calle Nacional, toward the exit for Pátzcuaro, taken from the corner opposite the *puestos* shown above. The clock tower is nearly obscured by the first light pole. The two-story structure with the flagpole is the municipal palace. Left foreground contains the fronts of two "curio" stores. The man seated on the edge of the sidewalk wears the normal *campesino* costume of straw hat, white blouse, and white trousers. The trees and group of people are at the front of the market plaza.

PLATE 7

- The views on this plate show the three principal phases or types of streets in Quiroga—unimproved dirt, cobblestone of the Díaz era, and modern asphalt pavement.
- a, The Calle de la Montaña is bordered by a stone wall on the left and an agave hedge on the right. Wheat fields occupy the bulk of the *manzanas* on both sides.
- b, The Calle del Abasto Viejo was cobblestoned in the days when the *arrieros* used this route to the nearest point on a railroad some 14 km. away at La Cacana via Zirandangacho. This is an excellent example of cobblestone pavement, with the road inclined from both sides toward the center, and large flat stones used to outline the center stripe. The woman in the distance is making use of the easier walking on these flatter stones.
- c, A view up Benito Juárez toward the Cerro de la Cruz. The consistent architecture on the right contrasts with the individuality shown by the older facades on the left. The balconies shown are not part of the normal older architecture in Quiroga.

PLATE 8

- a, The Calle de Guerrero from its corner with Benito Juárez. The stone sidewalks are of the type found in many of the central streets. Different house ownerships are indicated on the right side by vertical joining "cracks" and by changes in the height and color of the paint on the lower part of the fronts, and also by changes in roof height and pitch. The musicians (hired from a neighboring community) wear *campesino* and also *bracero* clothing (jumper, overalls).

- b, The Calle de Degollado clearly shows the central open-gutter type of drainage. Laterals from a number of houses carry sewage into the gutter. This is the only street in Quiroga which has both telephone and light poles. The doorways, house fronts, sidewalk, and paucity of windows are typical. At the upper end of the street is the Plazuela de Nicolás Bravo shown in plate 10.

PLATE 9

- a, The center of the Plaza Principal occupied by a water fountain or *pila* of cut stone and a column surmounted by a statue of America. The bandstand or *kiosko* is in the background. The large-leaved plant on the right is an ornamental banana. The water level in the *pila* is low and the boy bending over is trying to scoop up water to fill his two *botes*.
- b, The front of the Plaza Principal facing toward the point where Zaragoza and Benito Juárez merge and intersect with Nacional. Part of the Portal Hidalgo shows at the left, and one of the donated and inscribed cement benches or *lunetas* is near the center front. At the right is the semipermanent stall or booth of a vendor of soft drinks and tobaccos. The larger trees are ashes (*fresnos*). The individuals show a melange of dressing styles—most curious being the man with an award sweater (year bands but no letter) but otherwise *campesino* dress.
- c, A group of nearly typical *campesinos* (with serapes, carrying bags, *petates*) awaiting a bus in the exact center of the busiest street intersection in Quiroga. The Plaza Principal is in the background.
- d, The main *alcantarilla* and *pila* in the Plazuela de Valle. A dry-goods store or *cajón de ropa* is in the background. The trees by the *pila* are jacarandas. Girls are getting water in *ollas* and *botes*.
- e, The Plazuela de Mina on the left side of the Calle Nacional on the way out toward Pátzcuaro. This is always the first fountain to go dry in Quiroga. The trees are ashes.

PLATE 10

- a, The Plazuela de Nicolás Bravo (former Plazuela de Degollado and de los Naranjos) is located back of the church of La Concepción and at the intersection of several streets. The water *pila*, partly hidden by an ash stump, is being approached by a water-carrier. The houses in the background, in *manzana* 1 of *cuartel* I, have stores in the front rooms and are the homes of some of the wealthiest merchants in Quiroga. The trees near the *pila* are jacarandas.
- b, The large domed structure of brick and stone is an *alcantarilla* or water tower which feeds the local *pila* and also a number of other fountains downtown. The four girls are indulging in some gossip while getting water for use in their homes. The *olla* is more commonly used than the bucket. The two girls at the left have the more typical dress.

PLATE 11

- a, In the center is a house group belonging to a family in the Rancho de Icuácató. Both houses have walls of stone, logs, and poles, and the roofs are thatched with local grasses. To the right of the houses are the remains of a small corral for burros. This type of house is typical of the poorer families in the ranchos.
- b, One large patriarchal family inhabits this house group in the Rancho de la Tirímicua. This type of nearly square and basically wooden house is known as a *troje*, although the tile roofs are replaced by shakes in true *trojes*. The second house from the right has the hewn planks of a true *troje*, while the others are a composite of partly shaped logs, barked logs, adobes, etc. The corncobs heaped in front are used as fuel.
- c, This second house group in La Tirímicua displays a common diversity in materials and form. The house on the left has a thatched roof of four slopes and that on the right has but two *aguas*. The walls are a combination of dry stones, stones in adobe, logs, poles, and planks. The cloth and poles in the right foreground are protecting a *chayote*.

PLATE 12

- a, This *jacal* or barn near the Rancho de Atzimbo illustrates the structures built on a few of the larger farms. The open-work arrangement of the adobes should be noted.
- b, A fairly typical patio or open backyard on the periphery of Quiroga in the Barrio del Calvario. In the foreground a hen and some chickens are foraging; on the far side of the patio some *bateas* with freshly applied *maque* are drying in the sun; and a woman is examining the hair and scalp of a youngster for lice. The houses shown belong to three related families.
- c, A *portón* with tile roof, adobe pillars, and double swinging gate at the entrance to a maize field in La Tirímicua. At the left is part of a large yucca just beginning to flower. This is an unusually well-built *portón* for the ranchos and is more like the type encountered in town.
- d, This *portón* of timbers with a shake roof, and with a single *puerta de golpe*, in Sanambo is of the type most common in the ranchos. The walls or fences of crudely piled dry stones are typical.

PLATE 13

- a, The eastern, or Pueblo Nuevo, district of Quiroga viewed from the bell tower of the parish church. The municipal cemetery, marked by a large white gateway at the juncture of two walls, is in the middle background. The L-shaped building with a white tower at one end is the chapel of San Vicente and associated structures. Several walled patios with fruit and ornamental trees can be seen.
- b, The unpaved extension of Calle Salazar eastward toward an arroyo which flows into the Arroyo del Pueblo Nuevo. Five families inhabit the three structures shown. The adobe wall is topped with

growing grass, which is a rather common topping. In the previous picture most of the adobe walls are protected by tiles. In other cases pitahaya cactus is planted on the walls, and the cactus both protects the wall against erosion and discourages over-the-wall visitors.

PLATE 14

- a, The ornate front of this house is characteristic of the homes of some of the wealthier merchants and landowners. The windows are of wood, with iron grills or *rejas* in the lower portions. The sidewalk is of large bricks. It will be noted that the house number has been changed from 14 to 24 (on the Calle Iturbide). The large doorway is the entrance to a *zaguán*, or hall, and the large door contains a smaller door which is the one most commonly used.
- b, The large building marked Hotel, in three places, is on the corner of Benito Juárez (upon which it fronts) and Guerrero. It is most commonly known as the Posada Escobedo, and the swinging sign above the front entrance, or *zaguán*, carried this name until it was shot up by some "drunks" during our stay in Quiroga. This building in the previous century was the home of one of the wealthiest men in Quiroga, and was the finest private home in town. Now it contains, in addition to the hotel rooms on the upper floor, a small store on the corner, a shoemaker's establishment in the room just to the left of the hotel entrance, a butchershop where the flag is displayed, and a *fonda* (restaurant, cafe) in a room entered by the last two doors. Whenever fresh meat is available a red flag is displayed in front of a butchershop. A favored location for stores is on corners where the one room of the store is entered by two, three, or four closely spaced doors.

PLATE 15

- a, Interior patio in the Posada Escobedo. This patio is practically in the same condition as when the building was a private home, and serves to illustrate what lies behind a number of the unprepossessing house fronts. There are a number of patios in Quiroga which are richer in potted flowers and ornamental shrubs. However, the frogs decorating the center of the *pila* are unique in Quiroga. Most of the potted plants visible are pelargoniums and begonias.
- b, This corner is at the intersection of Benito Juárez and Guerrero on the south side of Benito Juárez. As the sign indicates, this structure is in the first block (*manzana 1^a*) of the first quarter (*cuartel I^a*) of town, and the street that goes by is the Avenida B. Juárez. The store which occupies the corner room has the address of (Juárez) 8. The signs are typical, especially those of the painkiller Mejoral and of Cumbres cigarettes. The lower sign advertises a soccer (Fut-Bol) game between the Nevado team of Pátzcuaro and the local Vasco de Quiroga team. The recently laid asphalt sidewalk is in visibly poor condition.

PLATE 16

- a, A wooden plow.
- b, The first plowing (in this case for maize), in a field near Zirandangacho. The plowman is carrying an ox goad.
- c, The second plowing, or *cruza*, which is crossing the furrows of the first plowing at an angle. This field is on the water divide between the Pátzcuaro Basin and the small undrained basin to the north—in the background. The jumper worn by the man is the only exotic element in the scene.

PLATE 17

- a, The bundles or shocks of wheat are tied with some knotted lengths of wheat straw. This scene is near Zirandangacho.
- b, Winnowing *habas* near La Tirímicua. The broadbeans were threshed by horses as shown in plate 19.
- c, The cut maize plants or *rastrajo* are often stored on such platforms above the reach of livestock.
- d, The tall slender plant next to Corona Núñez is *teosinte*—a rather common weed in this field near the Cerro Huarapo. The other “corn plants” are genuine maize.

PLATE 18

- a, Harvesting or *piscando* maize in a lowland field. The ears are ripped and broken out of their husks with the aid of a husking tool, and then are dropped in the *ixtle* harvesting bag. The weedy tangle in the cornfields at harvest time is characteristic. Small wild sunflowers are the most obvious weeds in this view.
- b, The wheat is cut with a sickle which usually has small saw teeth. This back-breaking method of reaping is practically the only one used locally for wheat. The reaper in the foreground is typically attired from *huaraches* on his feet to old straw hat.

PLATE 19

- a, Threshing wheat on an earth-bottomed threshing floor at the margin of a field on the slopes of the Cerro de la Muñeca above Quiroga. Mules and horses are being used here, but commonly only horses are employed.
- b, Threshing *habas* on the slopes of the Cerro Azul above the Plan de la Tirímicua. The sacks at the left contain winnowed broadbeans. The direction of movement of the animals is changed from time to time so that they will not become dizzy.

PLATE 20

- a, b, c, Stages in converting oak wood into charcoal high on the slopes of Tzirate. First (a) large logs are piled; then (b) smaller sticks complete the wood pile; and lastly (c) the pile is nearly covered with earth and a slow smouldering fire is started which chars but does not get enough oxygen to fully burn the wood.
- d, The side of a resinous pine is barked, scraped, and scarred to stimulate the flow of resin. Then slabs or *penas*

of the permeated wood are cut out and split into splinters which are sold as *ocote* wood for kindling fires, for house illumination, and as torchwood in general.

- e, A log or pole fence of a type common in the wooded highlands. Pine, oak, *tejecote*, and *madroño* are most used for fences in the order mentioned.
- f, Cut tules and some bundles or *manojos* of tule ready to be carried in to Santa Fe for making *petates*. The scene is that part of the lake shore closest to Quiroga.
- g, A large white *zapote* by the roadside in Quiroga.
- h, A very large and old avocado tree in the Calle del Aguacate to which it has given its name.
- i, A large *tejecote* or hawthorn tree on the Mesa de Santiago.

PLATE 21

- a, Out of each slab or *penca* is made one rough *batea*. The wastage in the log is evident.
- b, Crude *bateas* have been adzed out and planed off at this foot-of-the-tree (*al pie del árbol*) location. The two *bateas* shown are rejects. The mass of chips and shavings is wasted since such material practically never is taken home or to town to be used as fuel.
- c, The women who applied the *maque* to the *bateas* did not want their pictures taken, so this is the best picture we have of the process of applying the black and red slips.
- d, This little girl, clad in a one-piece slip, has been grinding the earths (the clods in the *bateas*) used in making the *maque*. The milling stones are at her feet.

PLATE 22

- a, *Bateas* (size *cuatro*) with black *maque* drying in the sun.
- b, Burnished and lacquered black *maque bateas* drying on a sidewalk. Note the ripple effect left by the adz marks.
- c, Distinctive *bateas* made by M. Valdovinos and his wife, in the Barrio del Calvario. In the back row, from left to right, the sizes are *á cuatro*, *á cuatro*, *á tres*, and *á cuatro*; in the front, the *batea* on the left is *chuchería* size, and the one on the right is *á tres*.
- d, This type of stall or booth for the sale of local handicraft “curiosities” is known as a *puesto*, *expedio*, or *venta de curiosidades*. *Bateas*, chairs, and turned-wood items make up most of the stock.

PLATE 23

- a, This display of *bateas* in the Plaza de los Mártires, shows several of the decorative styles, including the combination of birds with flowers. The ripple effect has been accentuated by the lighting conditions that obtained.
- b, c, A painted chest (*baul* or *petaca pintada*) of a type no longer made in Quiroga. This chest belonged to the grandmother of Don Jesús Gutiérrez Barriga (shown in b with his two daughters). The arrangement of the potted flowers is characteristic of the inner patios in the homes of the wealthier people of Quiroga.

- d, This display of painted pottery is outside of one of the leading curio stores in Quiroga. Most of the items were made in neighboring Santa Fe although some of the Santa Fe pottery is painted in Quiroga.

PLATE 24

- a, Chamaco-size chairs, with the wooden parts painted red, drying in the sun in front of a paintshop (*Taller de pintura*) on Calle Salazar. The house front and street are quite typical of the older portions of downtown Quiroga (El Centro). The joining line and the change in roof structure indicate that parts of two houses are shown.
- b, Three women decorating chairs. The location in a corridor or veranda on one side of a patio is characteristic. The pots or *macetas* holding the pelargoniums are somewhat larger and better than the average.

PLATE 25

- a, José Corona Núñez (left) and the postmaster Don José Medina Gaona (right) seated in *costurera* chairs and holding *juguete* chairs. The two chairs in front are *chiquito de niño* in size, and back of these are two *chamaco* chairs.
- b, From left to right the chair sizes are *juguete*, *chiquito de niño*, *chamaco*, and *costurera*.
- c, *Juguete* chairs, some painted red and others blue, drying in the sun. After the background paint is dry the chairs are decorated.
- d, *Mesera tosca* chairs, painted black, drying on the sidewalk in front of a paintshop.

PLATE 26

- a, The tule mat or *petate* section in a Sunday market. The *petateros* are lined up along a wall of the parish house or *curato* which forms one side of the Plaza de los Mártires. Most of the *petate* sellers are from nearby lake villages. The trees are privets.
- b, Part of the vegetable section in the Sunday market. A butchershop and a private home are in the background. The two women selling vegetables are from Santa Fe. The vegetables displayed are turnips, tomatoes, onions, cabbage, lettuce, carrots, and beets. The woman at the left front is a purer Indian type than the other. The partial curtains in the two windows are of the type ordinarily found in houses having glass windows.

PLATE 27

- a, Dried chiles, tunas, tomatoes, and other vegetables displayed on *petates* in the market. The costumes are typical excepting those of the man and boy at the upper right (a municipal employee and his son).
- b, Most of the pottery displayed in the Quiroga market comes from Tzintzuntzan and Santa Fe. The woman in the left foreground wears characteristic mestizo costume of rebozo, calico print dress, dark cotton

stockings, and shoes, while the next woman to the right is typically Indian in dress from bare feet to the type of rebozo worn.

PLATE 28

- a, *Campesinos* contemplating the baked agave (*mescal*) resources of the market. Two of the baked "cabbages" are visible between the second and third man from the right. The fourth man is holding a *morral*. The first three men on the right probably have on their "Sunday-best" clothes.
- b, An Indian woman with *mescal* for sale from the Tzintzuntzan area. Note the manner of carrying a child on the back, within the rebozo. The man at the left is the owner of one of the pool halls, and is a good representative of the merchant class.

PLATE 29

- a, The one gasoline station in Quiroga is situated in a corner of the Portal Matamoros. A freight truck (*camión de carga*) is parked by the gasoline pump. The lettering at the top of the cut advertises Mexolube, a lubricating oil produced by Pemex (the Government petroleum corporation). In the left background is the Portal Hidalgo and part of the Plaza Principal. The hour is shortly after sunrise on a winter morning, and there is a "nip" in the air. The water carrier is swathed in a store blanket, and the *campesino* with whom he is conversing has a locally made *cobija*. The man at the right is a transient dressed in "city clothes" (*catrin*). He and the girl (dressed in print dress, rebozo, and high-heeled shoes) are waiting for a bus to Morelia.
- b, The horse has brought part of an ox, just butchered in the *abasto* several blocks down the street, for delivery to a nearby butchershop.

PLATE 30

- a, This oxcart is of a modern type. The old-fashioned solid-wheeled carts apparently no longer exist in the area.
- b, While the bus is stopped and new passengers are seeking admittance other passengers get out to buy a snack—*tacos*, tamales, etc. This is a second-class bus on the Mexico City to Guadalajara route, and originates in Jalisco, as indicated by the name "Zapotlanejo."

PLATE 31

- a, The rural Federalized school "Redención" is really a suburban school in the Barrio del Calvario. The pupils are children of the local *ejidatarios*. This school occupies the renovated chapel of San Miguel which was constructed in 1850.
- b, The downtown or urban school (Federal primary school "Miguel Hidalgo") occupies rented quarters on the Calzada Ramón Corona a half block from the Plaza Principal. Note the changes in the house number. The sidewalk is of brick.

PLATE 32

- a, Two *batea* dancers looking at a catherine wheel which will be ignited later on this day of Corpus Christi. The two top *bateas* on the back of the central figure carry exotic landscape decorations, and four other decorative styles are represented. The dress of the *batellero* on the left is not authentic in the blanket and trousers.
- b, A catherine wheel (showing method of suspension), and a study in juvenile curiosity, clothing, and physical types.

PLATE 33

- a, Part of the barrier which outlined the walk from the Calle Nacional to the west or side entrance of the parish church on Corpus Christi. The barrier consists of henequen cordage supporting crossed cattails with orchids tied at each intersection. The municipal palace is in the background. The little girl was an unposed but welcome addition to the photograph.
- b, The bell tower of the parish church lost its upper member in an earthquake of nearly a century ago. The entrance to the church atrium from the Plaza de los Mártires is between the two pillars.

PLATE 34

- a, The chapel in Atzimbo is the oldest of the chapels in the ranchos of Quiroga. Also, it is the most ornate chapel, although the chapel in Sanambo is larger.
- b, Six little girls of a poor family of share croppers in La Tírmicua. They are pathetically poor and unschooled, with little hope for any improvement in life. They were too shy to look at the camera, but looked toward a neighbor woman for comfort and assurance.

PLATE 35

- a, The sober facade of the parish church as seen through an aisle of ash trees from the atrium of the church. The atrium was the site of the old cemetery, but practically all of the grave markers have been removed or covered over.
- b, A bronze plaque in honor of one of Mexico's greatest anthropologists (Nicolás León) was installed in February 1946 on the front of the house in which he was born. Attending the ceremony were children and grandchildren of Dr. León, several of whom are shown under the plaque (together with the author).

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Only a few of the most pertinent sources for this part of the report on Quiroga are listed here. Detailed bibliographies covering the natural landscape and history of Quiroga, the Pátzcuaro Basin, and northern Michoacán will accompany the other two parts of the report. (See p. 7.) A few of the historical sources are given here. Persons interested in more detailed bibliographic information should consult the item by Brand listed below.

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this material in the archives of the Departamento Agrario in Mexico City, where copies of all such material are kept.)

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Mexico, 1884-1907, known as the *Anuarios de Peñafiel*, which contain such varied information as the *fabricas de aguardiente* in Quiroga, local names of diseases, number and value of livestock, etc.

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The governor, or one of his secretaries, commonly presented to the State congress (at 1-, 2-, 4-, or 6-year periods) a report on his administration which was accompanied by statistics, historical material, and surveys of resources, economies, education, etc. A number of these reports have been published under titles beginning with *Memoria*, *Informe*, etc. These are usually cited as *Memorias*. A complete file does not exist, but we located the following years by consulting libraries, museums, and archives in Morelia and Mexico City: 1828-29, 1829-30, 1845-46, 1847-48, 1848-49, 1849-50, 1858-61,

1868-69, 1876-77, 1881-82, 1882-83, 1883-84, 1884-85, 1885-86, 1886-87, 1887-89, 1889-90, 1890-92, 1892-94, 1894-96, 1896-1900, 1900-04. There are reports available for some of the more recent years which we did not examine.

MICHOCÁN.

The State government in Morelia periodically publishes various compilations of laws pertaining to taxes, municipal government, education, etc. Among these we cite as illustrations:

Índice alfabético de la división territorial del Estado de Michoacán de Ocampo, en orden de municipalidades, tenencias, haciendas y ranchos, comprendidos en la Ley del 20 de julio de 1909. Morelia, 1910.

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Circular numero A/5 de la contaduría general de glosa. Morelia. 1945. This was a detailed statement of the State income by municipalities and sources of income, and was the first of its kind to be circulated since 1922.

Since about 1829 there have been a number of semi-official and official State periodicals, under various titles. The earlier journals are invaluable sources of historical, economic, and general statistical information. The various numbers of the current *Periódico Oficial* carry the decrees, laws, notices, etc., which must be published to become effective. Among these are found all general and specific items pertaining to lands, persons, and government in Quiroga. The file since 1915 constitutes an adequate continuation of the compilation by Coromina. We examined the following items:

El astro Moreliano, 1829-30.

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El ingenio, 1847-48.

El imparcial, 1848-50.

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La bandera roja, 1859-63.

(El) boletín oficial, 1863.

La República, 1863-67 (not examined). This was published by anti-imperialist forces in various towns of southern Michoacán.

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El progresista, 1871-76.

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PLATE 1.—Lake Pátzcuaro Basin from the air.

(For explanation, see p. 232.)



PLATE 2.—The highland ranchos of Quiroga from the air.

(For explanation, see p. 232)

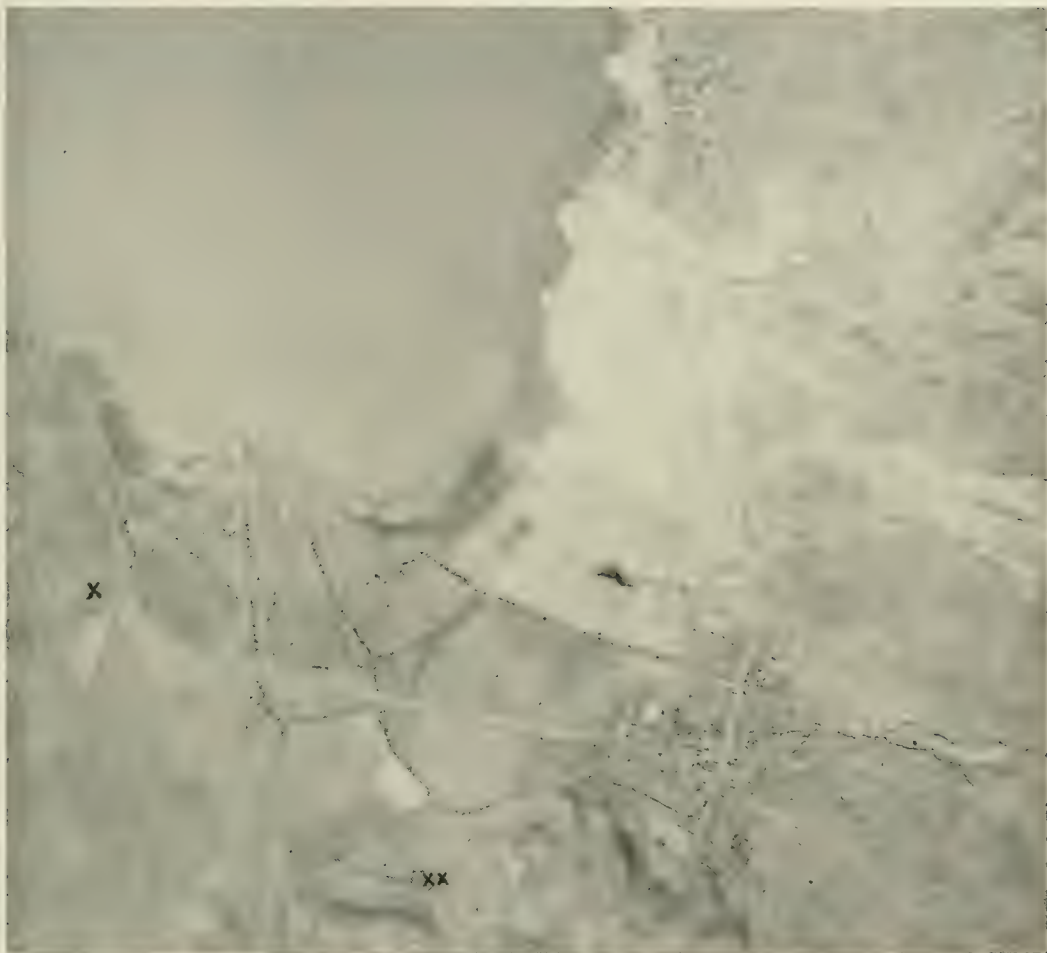


PLATE 3.—The Villa de Quiroga from the air.
(For explanation, see p. 232.)



PLATE 4.—Landscapes. *a*, View over La Tirimicua toward Lake Pátzcuaro. *b*, View over the *panteón* toward the lake.
(For explanation, see p. 232.)



PLATE 5.—Landscapes. *a*, The Villa de Quiroga from the southwest. *b*, Quiroga from the southeast.
(For explanation, see p. 232.)



PLATE 6.—Street scenes—main streets. *a*, View down Calle Benito Juárez decorated for the Day of the Cross, May 3.
b, *Puestos* on a street corner. *c*, View down the Calle Nacional.

(For explanation, see pp. 232-233.)



PLATE 7.—Street scenes evolutionary sequence. *a*, Calle de la Montaña, an unpaved street on the margin of town. *b*, The cobblestone-paved Calle del Abasto Viejo at an exit from town. *c*, View up Calle Benito Juárez—a modern paved street.

(For explanation, see p. 233.)



PLATE 8.—Street scenes—side streets. *a*, Band of musicians going up Calle de Guerrero. *b*, A typical street scene on the Calle de Degollado.

(For explanation, see p. 233.)



PLATE 9.—Plazas and water supply. *a*, Statue of America in the Plaza Principal. *b*, Front of the Plaza Principal. *c*, A group of men in the exact business center of Quiroga. *d*, The Plazuela de Valle. *e*, The Plazuela de Mina.

(For explanation, see p. 233.)



PLATE 10.—Plazuelas and water carriers. *a*, The Plazuela, Nicolás Bravo at the intersection of Degollado, Jiménez and Aldama. *b*, The *alcantarilla* in the Plazuela de Valle.

(For explanation, see p. 233.)



PLATE 11.—Houses in the ranchos. *a*, Houses in Rancho de Ieuácato. *b*, *Troje* house group in Rancho de la Tirimicua. *c*, Another house group in Rancho de la Tirimicua.

(For explanation, see p. 234.)



PLATE 12.—Rural structures. *a*, A jacal near Atzimbo. *b*, A suburban patio. *c*, A *porlón* in La Tirfincua. *d*, A *porlón* in Sanambo.
(For explanation, see p. 234.)



PLATE 13. —The Pueblo Nuevo district of Quiroga. *a*, View showing roofs, patios, and walls. *b*, Houses fronting an unpaved street in Quiroga.

(For explanation, see p. 234.)



PLATE 14. "Upper-class" houses in "El Centro" district of Quiroga. *a*, Ornate facade of a downtown house belonging to a wealthy landowner. *b*, The Hotel or Posada Escobedo.

(For explanation, see p. 234.)



PLATE 15. a, Interior patio of the Posada Escobedo. b, Corner with typical signs.
(For explanation, see p. 234.)



PLATE 16.—Plows and plowing. *a*, A yoke of oxen attached to a wooden plow. *b*, The first plowing. *c*, The second plowing, or *cruza*.

(For explanation, see p. 235.)



PLATE 17.—Wheat, broadbeans, maize, and *teosinte*. *a*, Tying wheat shocks. *b*, Winnowing broadbeans. *c*, A platform for *rastrajo*. *d*, *Teosinte* and maize.

(For explanation, see p. 235.)



PLATE 18.—Harvesting maize and wheat. *a*, Maize. *b*, Wheat.

(For explanation, see p. 235.)



PLATE 19.—Threshing wheat and broadbeans. *a*, Threshing wheat. *b*, Threshing broadbeans.

(For explanation, see p. 235.)



PLATE 20.--Charcoal burning; pitch pine; log fence; tules; fruit trees. *a-c*, Charcoal burning. *d*, Pitch pine. *e*, Log fence. *f*, Tule harvest. *g*, *Zapote blanco*. *h*, *Aguate*. *i*, *Tejocote*.

(For explanation, see p. 235.)



PLATE 21.—*Batea* manufacture. *a*, Pine-log *pencas* have been cut. *b*, Rejected *bateas* and chips and shavings. *c*, *Maqueando bateas*. *d*, Earths for the *maque*.

(For explanation, see p. 235.)

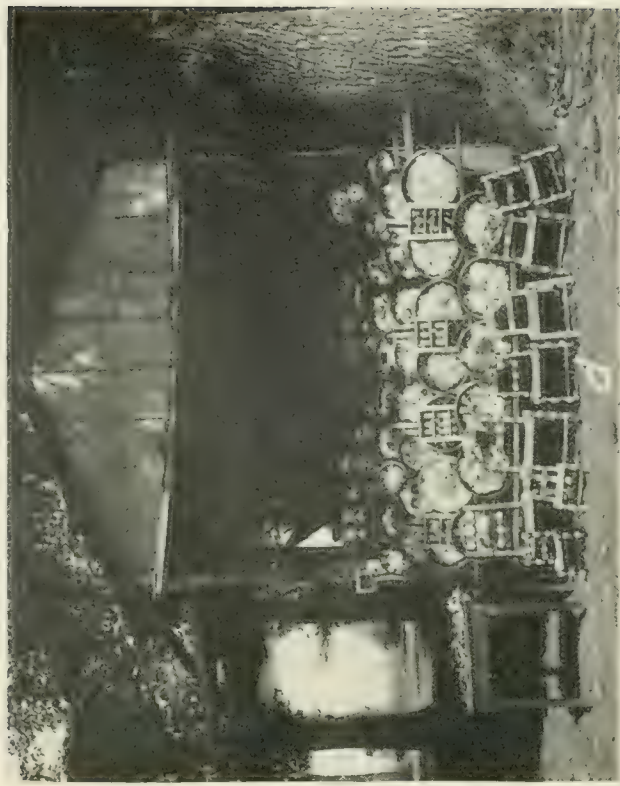
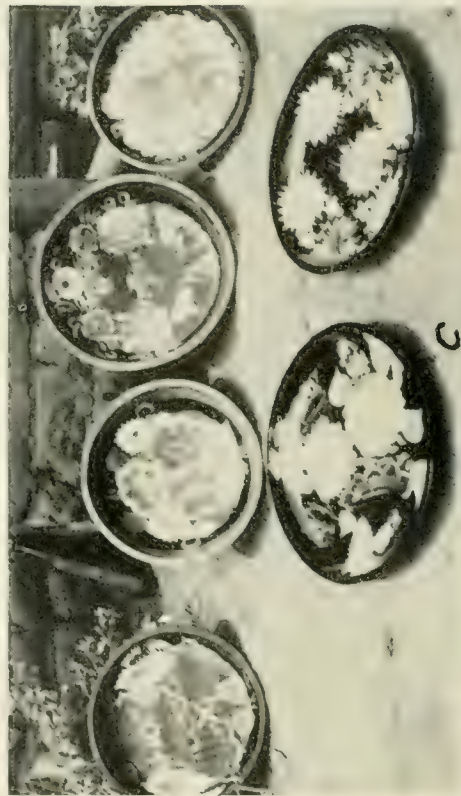


PLATE 22. *Bateas* with *maque* and finished *bateas*. *a*, *b*, Slipped *bateas* drying in the sun. *c*, Finished *bateas*. *d*, A *paslo* or *expando* of local *curtisdaghs*.

(For explanation, see p. 255)



PLATE 23.—*Batea* display; painted chest; painted pottery. *a*, A modest *puerto de bateas*. *b*, An old-type “lacquered” chest. *c*, Same chest as in *b* from a different angle. *d*, Display of painted pottery.

(For explanation, see pp 235-236.)



PLATE 24.—Drying and decorating chairs. *a*, Chamaco chairs drying in the sun. *b*, Decorating chairs.

(For explanation, see p. 236.)

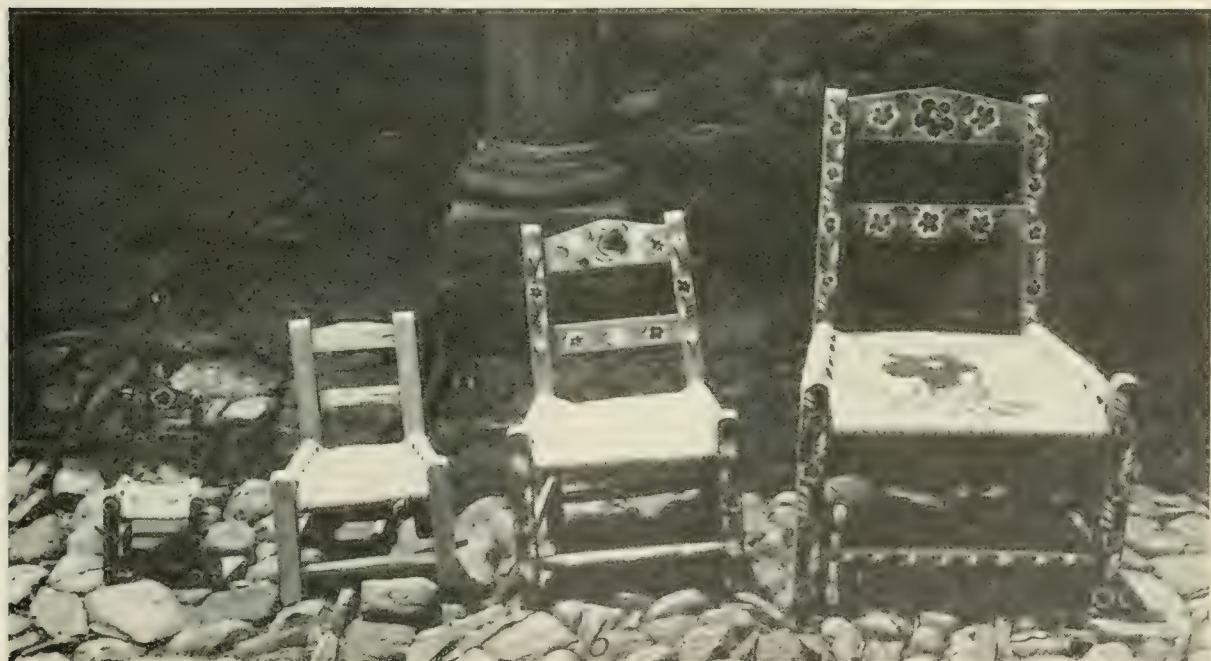
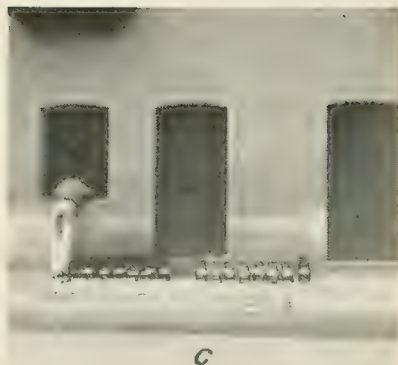


PLATE 25.—Different chair sizes. *a, b*, Different sizes of decorated chairs. *c, d*, Chairs drying.

(For explanation, see p. 236.)



PLATE 26.—Market scenes: *petates*, vegetables. *a*, *Petate* section in the *mercado*. *b*, Vegetables in the market.

(For explanation, see p. 236.)



PLATE 27.—Market scenes: vegetables, pottery. *a*, Vegetables in the *mercado*. *b*, Part of the pottery section in the market.

(For explanation, see p. 236.)



PLATE 28. — Market scenes: roasted *mescal*. *a, b*, Unposed groups in the *mescal* section of the market.

(For explanation, see p. 236.)



PLATE 29.—**Transportation.** *a*, The gasoline station in Quiroga. *b*, Meat delivery.

(For explanation, see p. 236.)



PLATE 30.—Transportation. *a*, Oxen and fairly modern cart. *b*, Passenger bus.
(For explanation, see p. 236.)



PLATE 31.—Schools. *a*, Rural school. *b*, Urban school.

(For explanation, see p. 236.)



PLATE 32. Corpus Christi *batea* dancers and catherine wheels. *a*, *Batea* dancers and catherine wheel. *b*, Catherine wheel.

(For explanation, see p. 237.)



PLATE 33.—Cattail and orchid barrier; bell tower. *a*, Detail of cattail barrier erected for Corpus Christi.

church.

(For explanation, see p. 237.)



b, Bell tower of the parish



PLATE 34.—Rural chapel; rural children. *a*, Chapel in Atzimbo. *b*, Children in La Tirúmicua.

(For explanation, see p. 237.)



PLATE 35.—Parish church; Nicolás León Plaque. *a*, The atrium and front of the parish church. *b*, Part of the group which unveiled the plaque in memory of the anthropologist Nicolás León.

(For explanation, see p. 237.)

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CRUZ DAS ALMAS A BRAZILIAN VILLAGE

by

DONALD PIERSON

with the assistance of

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PIERSON, CARLOS BORGES TEIXEIRA, AND OTHERS

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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
INSTITUTE OF SOCIAL ANTHROPOLOGY,
Washington 25, D. C., June 24, 1949

SIR: I have the honor to transmit herewith a manuscript entitled "Cruz das Almas: A Brazilian Village," by Donald Pierson, and to recommend that it be published as Publication Number 12 of the Institute of Social Anthropology.

Very respectfully yours,

GEORGE M. FOSTER, *Director.*

DR. ALEXANDER WETMORE,
Secretary of the Smithsonian Institution.

* * * *

PUBLICATIONS OF THE INSTITUTE OF SOCIAL ANTHROPOLOGY

1. Houses and House Use of the Sierra Tarascans, by Ralph L. Beals, Pedro Carrasco, and Thomas McCorkle. x+37 pp., 8 pls., 20 figs. 1944.
2. Cheran: A Sierra Tarascan Village, by Ralph L. Beals. x+225 pp., 8 pls., 19 figs., 5 maps. 1946.
3. Moche: A Peruvian Coastal Community, by John Gillin. vii+166 pp., 26 pls., 8 figs., 1 map. 1947.
4. Cultural and Historical Geography of Southwest Guatemala, by Felix Webster McBryde. xv+184 pp., 47 pls., 2 figs., 25 maps. 1947.
5. Highland Communities of Central Peru, by Harry Tschopik, Jr. viii+56 pp., 16 pls., 2 maps. 1947.
6. Empire's Children: The People of Tzintzuntzan, by George M. Foster assisted by Gabriel Ospina. v+297 pp., 16 pls., 36 figs., 2 maps. 1948.
7. Cultural Geography of the Modern Tarascan Area, by Robert C. West. vi+77 pp., 14 pls., 6 figs., 21 maps. 1948.
8. Sierra Popoluca Speech, by Mary L. Foster and George M. Foster. iii+45 pp. 1948.
9. The Terena and the Caduveo of Southern Mato Grosso, Brazil, by Kalervo Oberg. iv+72 pp., 24 pls., 2 charts, 4 maps. 1949.
10. Nomads of the Long Bow: The Siriono of Eastern Bolivia, by Allan R. Holmberg. iv+104 pp., 7 pls., 4 charts, 1 map. 1950.
11. Quiroga: A Mexican Municipio, by Donald D. Brand. v+242 pp., 35 pls., 4 maps. 1951.

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PREFACE

This study constitutes a part of the joint program in which the Institute of Social Anthropology of the Smithsonian Institution and the *Escola Livre de Sociologia e Política* of São Paulo are collaborating. The primary objectives of this program are the training of local research personnel in social science methods and techniques, partially in the classroom but more especially in the field, the meanwhile research is carried on with reference to Brazilian societies and cultures.

It is now becoming more widely known that, in both area and population, Brazil constitutes approximately half of the South American continent; and that, in language, in various other cultural elements, and in certain circumstances of its formation, this vast and increasingly important country varies from the rest of Latin America.

Although the development of industry, especially in the São Paulo-Rio de Janeiro region, has been increasingly evident in recent years, Brazil is still a predominantly agricultural country. Its rural population is therefore of especial significance.

The present study seeks to reveal the life of rural people in the hills not far from the city of São Paulo. Although relatively isolated, they participate in what might be called the national culture; that is, with reference to language and other basic cultural elements, they do not constitute a people apart. In fact, with the exclusion of what might be referred to as "Indian country," their way of life is characteristic, to a considerable extent, of all rural Brazil.

There are, of course, significant regional variations. In certain parts of the country, like, especially, the *Reconcavo* of Bahia, the coastal region of Pernambuco-Alagoas-Sergipe, the southern portion of the State of Minas Gerais, and areas around Campos in the State of Rio de Janeiro and São Luiz in Maranhão, a larger portion of the cultural and associational system is African in origin; while in other parts like, for example, central and northern Goiás and the State of Mato Grosso, a larger portion is of Indian derivation. In certain

parts of southern Brazil, especially the valley of the Itajaí in Santa Catarina and the valley of the Jacuí in Rio Grande do Sul, the European contribution of other than Portuguese origin is pronounced; and in areas like that of the valley of the Ribeira and the "Alta Sorocabana" in the State of São Paulo, the Japanese contribution has been considerable. In areas where circumstances of a different geographical character are particularly operative, like those of the semiarid Nordeste; the humid, heavily timbered area of the Amazon and its tributaries; the grasslands of the central, southern, and western states; and the coastal belt, where fishing is an important means of sustenance, other significant variations are to be found. In certain other parts of the State of São Paulo, agricultural development is further advanced and is otherwise of a somewhat different character. A considerable part, however, of that which is here set down with reference to the local society and culture, is probably characteristic of the rural population in all Brazil, outside the principal cities and those regions still inhabited exclusively, or almost exclusively, by tribal Indians.

With the assistance of a graduate student, Carlos Borges Teixeira, a survey of southeastern São Paulo and contiguous areas in the States of Minas Gerais and Rio de Janeiro was made in the latter part of 1946 and the first month of 1947. A number of small settlements, ranging from fishing villages on the coast like Icapara in the State of São Paulo to mountain towns like Paraisópolis in Minas Gerais, were visited. Preliminary information was obtained on the origin and development of each settlement and its ecological base, society, and culture (Pierson and Teixeira, 1947).^a

This survey indicated that, even in the more isolated areas, and in spite of a biological heritage in which the Indian figures to a considerable extent, the process of "Europeanization" is far advanced; that is, that Portuguese culture, modified, of course, by the interaction of its culture bearers

^a References in parentheses refer to Bibliography, p. 220.

over a considerable period of time under the conditions of a new habitat, has almost completely replaced the indigenous culture. Not only have comparatively few of the original Indian techniques survived, but also little of such tenacious elements as folk beliefs and the practices associated with them. It is in the less obvious and more subtle aspects of culture, in the attitudes, sentiments, and points of view which a people reveal to the outsider only upon intimate contact, that there are more likely to be found vestiges of Indian origin.

On the basis of this survey, the village of Cruz das Almas was selected as the settlement which, in the plateau region, seemed best to combine the necessary circumstances of a comparatively long history, uninterrupted by significant intrusions from the outside, a considerable degree of Indian ancestry in the population, and an absence of industrial activity in the area, to reveal the basic cultural patterns of the region, previous to modification under the impact of an industrial order. It also had the practical advantage of accessibility from São Paulo so that those students who were unable to be away from the city for an extended period of time might also participate in the research.

Accordingly, a house was rented in the village and Carlos Borges Teixeira resided there from February 1947 through August 1948, during which time he gained the confidence and respect of the local inhabitants and came to participate intimately in their society and culture. As he became known and accepted in the community, other graduate and undergraduate students visited the village, especially on week ends and during holidays. In this way, a promising foundation was laid for systematic field work.

Students began by keeping a diary, in which there was set down everything observed in the community which seemed interesting or important. When the author was unable to be in the field, Carlos Borges Teixeira and other students returned to São Paulo each week or two to discuss observations made during the preceding period. As there emerged out of this descriptive data a clearer picture of the relative values of the different cultural and associational elements, subsequent work was planned in terms of more systematic analysis.

Especially in the early stages of the study, the approach was thus kept as empirical as possible, in an attempt to avoid implanting upon the subject matter, any more than could possibly be avoided, a preconceived system of descriptive and analytical categories which would result merely in illustrating what was in our minds beforehand. This does not mean that we began work without a frame of reference or hypotheses and that our interest was only in piling up discrete and unrelated "facts." It was rather that we felt that organization of data, insofar as possible, should *emerge out of* reality, rather than be imposed upon it, especially since we were working with a cultural and associational system which previously was unknown, in considerable part, at least to the author. In other words, the on-going life of the community was given a determinant role in the systematization designed to make the "facts" intelligible and communicable.

During December 1947 and January and February 1948, the author and his wife, aided especially by Carlos Borges Teixeira and Maria Mirtes Brandão Lopes, and also by Og Francisco Leme, Cecília Maria Sanioto, and Lizette Toledo Ribeiro, carried on systematic interviewing on farms in the community. The men in the group, who usually were not over two in number at any one time, interviewed the farmer in the field among his crops, while the women, also usually not over two in number at any one time, remained in the house, conversing with the farmer's wife and daughters. Since comparable data of a statistical character with reference to a considerable number of items was desired, a schedule was used by the men. The interviews at the house, however, were all carried on without a schedule, although specific questions to be asked were determined beforehand. Later that year, especially in June and August as well as on several week ends and holidays, further systematic interviewing was carried on in the village and on the farms.

Subsequent to his enrollment, in March 1948, as a graduate student at the Escola Livre de Sociologia e Política, Levi Porfírio da Cruz was closely associated with the study, spending a number of week ends in the field, as well as the vacation months of July and December of that year, and otherwise assisting with the collection and verification of data.

Perhaps as much effort went into checking materials as into their collection. Accounts given by one informant were constantly checked with accounts given by other informants. In the preparation of the manuscript, considerable care was exercised in the use of such words as "often," "sometimes," "most," "many," "several," and "few," so as to describe as precisely as possible the degree of variation from universality. When, during the writing of the monograph, doubt arose regarding the accuracy of a statement, other members of the research staff were consulted. When these doubts could not be resolved, a return was made to the field.

The experience of preparing the monograph for publication strengthens the conviction that the author has long held regarding the value, if not the absolute necessity, that one or more of the persons undertaking any research project be intimately familiar from birth with the society and culture in question, so that the subtle meanings of cultural forms which may escape the outsider, and which conceivably may be among the most important elements of that culture, will more likely be discovered and given the description and analysis which they merit. From this point of view, the program of the Institute of Social Anthropology is especially fortunate, in that it involves, as has been indicated, close collaboration between persons from indigenous as well as United States institutions.

To protect the anonymity of informants, especially in consideration of the intimate character of much of the data here presented, their names, as well as the name of the village itself, are fictitious. In large part, however, the names used for local individuals, as well as that used for the village itself, have at one time or another been employed in the community.

To hire the services of informants, which ordinarily is, in the author's opinion, a precarious procedure in any case, is virtually impossible in this culture. In most cases, no amount of effort will persuade a local inhabitant that, by talking to a researcher, he has merited any remuneration whatever. The offer of payment is apt to be considered an insult or at least to imply hidden motives which by reason of their obscurity are to be feared. Even gifts to informants must be presented with tact, so that the recipient does not

feel under the obligation of making a gift in return. One of the most effective techniques in this respect is to present informants with photographs, taken of themselves, of some member of their family or of something which they own and prize.

Whenever a word or phrase has been introduced into the account to support general statements or to make the account more understandable, the translation has been made literally, if it was thought that such a version would be of particular interest or utility; in most cases, however, translations have been made freely, in order to give as nearly as possible the precise meaning in English. No attempt has been made to translate such terms as *alma* and *santo*, although in each case there exists an English equivalent, since to do so would convey to the mind of the reader, especially in the United States, a context of meaning diverse from that which adheres to the Brazilian equivalent. Perhaps it should also be emphasized that when a local word or phrase is retained in the text, variations from standard Portuguese usage, which one familiar with the language will at once note, are due to the fact that the word or phrase is given in the *caipira* dialect. Accents occasionally have been added to Portuguese words even when they are not commonly used in Brazil so as to aid the English reader in the pronunciation of terms which may be unfamiliar.

Records were taken of the estimates, made by farmers, of the yields of the various crops grown in the community. Since, however, informants are little given to thinking in such terms, the data so obtained, until they are checked by actual measurements which it was not possible to undertake during the course of this study, are probably not accurate enough to be included.

To the many villagers and members of farm families who, with unfailing courtesy and consideration, received the author and his wife, as well as other members of the research staff, and who gave unstintingly of their time and information, I am deeply grateful. Once their confidence has been gained and the motives in asking questions identified, the rural people of Brazil are among the most willing and articulate informants it has been my privilege to know.

To the administration of the Escola Livre de Sociologia e Política, and especially to its director,

Cyro Berlinck, who has always accompanied with interest and understanding, efforts to carry on research in the social sciences, as well as A. R. Müller and Octávio da Costa Eduardo, I am under particular obligation for unfailing support and encouragement.

For assistance in selecting the locus of study, I am indebted to a former student and present colleague, Mario Wagner Vieira da Cunha. For suggestions regarding possible sources of information regarding the history of the area studied, I am grateful to Affonso de E. Taunay, Sergio Buarque de Hollanda, and Caio Prado Junior; and for assistance in obtaining such information, to Padre João Kulay, of the Arquivo of the Curia Metropolitana of the city of São Paulo, Paulino de Almeida, director of the Seção Histórica of the Arquivo Público of the State of São Paulo, and Conego J. de Castro Nery. For assistance in identifying the wildlife common to the local habitat, I am indebted to Dom Bento Pickel of the Serviço Florestal, Eduardo Navajas of the Instituto Biológico, Carlos de Cunha Vieira, Messias Carrera, Maria Aparecida Vulcano d'Andretta, and Antonia Amaral Campos of the Departamento de Zoologia, all of São Paulo. For assistance in obtaining statistical data, I am grateful to Olavo Batista Filho of the Instituto Brasileiro de Geografia e Estatística, Manoel Dutra R. Perdigão and Odete Terezinha Wilmers of the Departamento de Estatística, Mario Zaroni of the Secretaria da Agricultura, Manoel Siqueira of the Secretaria da Fazenda, and Antonio Florencio of the Superintendência do Café, all of São Paulo. Father Gregory Feige assisted in the identification of terms used in connection with religious ritual and belief. Obviously, however, no one but the

author is responsible for any inaccuracies which may occur.

Maria Mirtes Brandão Lopes typed most of the field notes of the research staff, as well as the final draft of the manuscript. Both she and Levi Porfírio da Cruz read the entire manuscript and offered valuable criticism. Were it not for the fact that monographs in Portuguese, based on our common field notes, to be submitted to the Escola Livre de Sociologia e Política of São Paulo as theses for the master's degree and subsequently published, are planned by both, these collaborators might well figure as coauthors of this publication. Juarez Rubens Lopes spent several week ends in the field and also assisted in the collection of data available in the city of São Paulo. Fernando Altenfelder Silva and Mauricio Segall visited the community, and the former, together with Paulo Eduardo da Costa, aided in the collection of information which was available in public depositories in the capital city. The notes of the preliminary surveys referred to above were typed by Maria Aparecida Cardoso. Approximately 30 of the photographs appearing in the plates were taken by Harald Schultz and about an equal number by Levi Cruz; several others were taken by Carlos Borges Teixeira. The figures were prepared by Duílio Rizzi and Mario Augusto Pinto. My wife, Helen Batchelor Pierson, has been an invaluable assistant, both in research and in the preparation of the manuscript.

Additional materials were collected, especially on the relation of the individual to culture and the treatment of disease, which probably will be published later.

DONALD PIERSON.

SÃO PAULO, BRAZIL,
June 1949.



MAP 1.—South America, showing Brazil and the State of São Paulo.

CRUZ DAS ALMAS: A BRAZILIAN VILLAGE

BY DONALD PIERSON

THE VILLAGE

Six miles from the Brazilian seacoast at Santos, an escarpment rises abruptly 2,400 feet. This is the edge of the vast Brazilian *planalto* which extends interior 400 miles to the Paraná Valley in the west and 1,300 miles to the Amazon Basin in the north. Up on the plateau, 24 miles from its edge and in the midst of gently rolling hills, lies the modern city of São Paulo, with nearly two million people and a rapidly expanding industry which has made it the principal industrial center of Latin America. Her inhabitants proudly call São Paulo the "fastest growing city in the world."¹

Starting as a brook in the mountains 60 miles to the east of the city, the historic Tietê River flows shallow and sluggish through the metropolis. It then continues on in a generally westward direction toward the Paraná, where its waters, a portion of which have come interior almost from the very rim of the *planalto*, turn and flow southward and finally, after having traveled some seventeen hundred miles, reach the Atlantic below Buenos Aires in Argentina. It was this river which served as the main artery of advance to the west for the famed *bandeirantes* who in the sixteenth and seventeenth centuries periodically set out from the region around São Paulo to explore, and to some extent to exploit, immense areas in the center of the South American continent; hardy adventurers who penetrated previously unknown areas as far west as Peru, as far south as Paraguay, and as far north as the edge of the Amazon Basin. The first towns to rise along or near the banks of this river, historic settlements like Parnaíba, Itú,

Porto Feliz and Tietê, became important *bocas do sertão* (gateways into the wilderness).

Westward from São Paulo, the Tietê River is followed rather closely by a dirt road which is rough and dusty or muddy with the season. Within a few miles, the terrain begins to turn more rugged until by the time one has reached Paratinga, he is in the midst of quite hilly country. From here a well-worn and occasionally rough trail leads over the hills. At times this trail is wide enough to accommodate the two wheels of an oxcart; then the vegetation closes in for a while and first one track and then the other disappears in the weeds and tall grass. At the end of this trail, nestling among the hills of the Serra de São Francisco, less than a hundred miles from the eastern rim of the vast Brazilian *planalto*, lies the village of Cruz das Almas which everyone in the area around calls simply, *A Vila*, or "the village."

If one prefers, however, on the way out from São Paulo he may continue on from Paratinga 9 miles to Piracema and then, by doubling back on the second arm of a V, reach the village after 7 miles. The advantage is that the road from Piracema, although rough and uneven, is wider and clear of vegetation. One may also reach the village by another and longer road from São Paulo, now kept in quite good repair, which runs some miles to the south of the river. At Boa Vista, one turns northward to take a rather rugged dirt road over the hills 11 miles to the village.

A railroad also runs out from São Paulo in the same general direction. A 2-hour ride brings one to a small town hidden in the hills, São José dos Patos, where he may be able to arrange a horse to take him over the steep hills 9 miles to the village.

¹ There is some justification for this statement. The population in 1872 was only 31,385; in 1890, 64,934; in 1900, 239,820; in 1920, 579,033; and in 1940, 1,318,539. It is estimated to be at present (1948) 1,881,566.

If he prefers, he can continue on a few miles to Boa Vista where he may be fortunate enough to find a truck going to the village; or, by paying a rather high fare, he may hire an automobile to take him there.

When the Tietê River reaches the town of Paratinga, it is only 12 miles east of the village and at Piracema only 7 miles away. Soon thereafter it bends to the north, then again to the west, then to the south where it passes to the *west* of the village, before once more continuing on its generally westerly way toward the Paraná. The river thus creates to the north of the village a "peninsula" approximately 4 miles long and an equal distance wide, a part of the community where the river has, as it were, trapped the population. There are no bridges here of any kind for many miles. The river is passable by canoe or row boat, but only in the dry season. At the most southerly point of the curve, a shallow creek flows into the river. Three miles up this creek is the village.

From the right bank of the creek, the village spreads out over a gently rising slope up toward the ridge where the cemetery is located. The principal street, called the *Rua da Penha*, connects the cemetery at this end of the village with the church which faces it at the other end, near the creek. A third of the way up from the church, the *Rua da Penha* is joined by a road which comes in from Boa Vista. At nearly the same spot, it is joined by another road which comes in from the opposite direction after following a generally northward course from São José dos Patos.

This central pattern of a rude cross as seen from the cemetery is elaborated in three respects: an oblong *praça*, known as the *Praça da Matriz*, leads off the *Rua da Penha* to one side of the church; a short street, the *Rua do Pasto*, leads off this *praça* and roughly accompanies the creek as it flows away from the village; another short street, the *Rua Nove de Julho* parallels the *Rua da Penha* from the church up to the São José dos Patos road.

The *Rua da Penha* takes its name from *Nossa Senhora da Penha*, to whom the village church is dedicated; the *Praça da Matriz*, from the church itself. The *Rua do Pasto*, or "the Street of the Pasture," apparently led originally to a community grazing ground on the outskirts of the village. The *Rua Nove de Julho* (July 9th St.) commemo-

rates the São Paulo uprising of 1932. All the streets are of dirt. An occasional sidewalk of broken stone is wide enough only for one person to pass at a time.

Immediately behind the church and across the creek, a grass-covered hill rises some two hundred feet. At the opposite extremity, as has been indicated, is a ridge. At the other two sides of the village, the land also slopes in from surrounding elevations. The village thus lies in a hollow between ridges and hills. From whatever angle it is approached, one comes upon it suddenly, almost unwarned by any evidence of its existence.

That the inhabitants of the village live close to the soil is symbolized in their dwellings. The houses settle down into the surrounding vegetation and tend at times almost to disappear. The once reddish-brown tiles have mildewed or weathered into a dark gray or greenish-black color which blends into the trunks and branches of the trees and shrubs. The bare mud walls of those houses which are without calcimine resemble closely the earth from which they have come. The bricks of other houses are naturally of the same reddish-brown color as the soil of which they have been made. Even those dwellings which have been calcimined in white or pale yellow, with the passing of time and the accumulation of dust, also look much like the earth around them. It almost seems that the village and its surroundings are one, houses and vegetation blending into each other and both into the earth from which they have sprung.

On Sundays, when the farm families come in to Mass or to make purchases at the village stores or to visit their relatives and friends, and on days of *fésta*, there is considerable movement in the village. Ordinarily, however, the streets are largely deserted. Only an occasional man or boy may be seen walking along or going into one of the stores. Two or three men or (more rarely) a group of men may be talking quietly together. An occasional horseman rides into the village. On rare occasions, an oxcart appears, creaking on wooden axles, or perhaps a truck. The children play quietly at their homes; only occasionally are they to be seen in the street. Women also are seldom seen. They keep pretty much to their houses, appearing only when one or more of them have to go down to the creek to do the washing or to

one of the stores to make purchases or when a passing truck or automobile attracts peeping eyes to the windows.

A few hours after sundown silence settles over the village. A single light can be seen shining through the upper window of the church. A few last purchases are being made at the stores. By 8 o'clock or shortly thereafter, they will be closed. The lantern in the *bar* will continue to throw its light out into the street for perhaps another hour when the *bar* too will close and then only the moon, if it be up, and a wakeful dog or two, will be at vigil. The rest of the village is asleep.

The silence is so intense that the chirp of a cricket can be clearly heard. The sound of footsteps on gravel of a man coming home late from visiting friends or from a fishing or hunting expedition falls heavily on the ear. Before daybreak the next morning, the crowing of cocks and the voices of early risers echoing outside the window, awaken one who is accustomed to the noises of the city more quickly than the city's roar.

In the community of which the village is the center, live a few hundred of those several million Brazilians who are the rural inhabitants of a predominantly rural people. Biologically and culturally they represent to a considerable extent the nonurban population of the vast area between the eastern coast and the westernmost point of settlement. Although there are clearly defined regional variations, this population has much in common. In general, it is composed of relatively isolated, nonliterate (or only partially literate) descendants of assimilated Indians, mixed in varying degrees with Europeans and, in many cases, with Africans. Although there are regional variations in the number of words and expressions of Indian or African origin which are commonly employed and also other dialectal differences, the language throughout this area is basically Portuguese. And although from region to region the Indian or African contribution to the culture and to the forms and processes of collective life vary, these also are extensively, and in most cases basically, European.

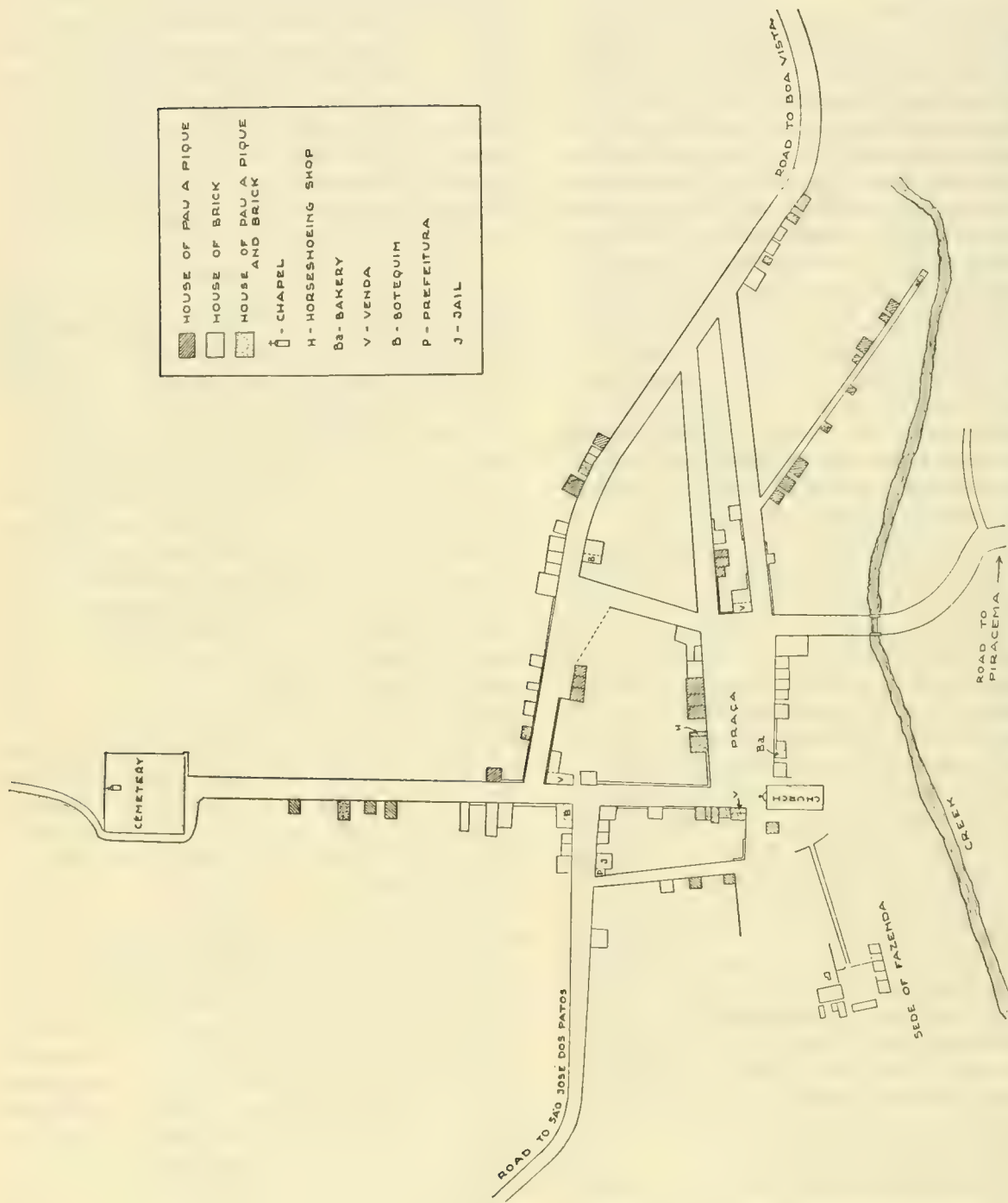
With the development of the cities a class of cosmopolitan character has emerged whose members are in direct contact with such world centers as New York, London, and Paris. If it may be said that this class represents the "icing" of

the Brazilian "cake," the rural inhabitants constitute its solid substance.

These rural inhabitants are known by different names in different parts of Brazil, all of which emphasize their rural and largely nonliterate character. In the area under study, they are called *caipiras*, a term which distinguishes the rural inhabitants of the São Paulo *planalto* from the *caçaras* of the coastal shelf of this State. The difference in terminology, however, defines only a limited difference in the character of population, society, or culture.

The last Indian in the region is said to have died in a public institution of a neighboring town several years ago. No present resident has known Indians in the community. The vestiges of Indian culture which still persist are extremely few. The population, however, gives evidence of a considerable contribution of Indian blood to its highly mixed but predominantly European character. The African contribution, which for the most part has been more recent and is more visible, has not been negligible. Few vestiges of African culture, however, still persist. It would seem that the cultural imperialism of the Portuguese, a partially conscious, partially unwitting process, has been as effective as their deliberate policy of racial mixture. Freely mixing with other peoples, they nevertheless have maintained rather tenaciously their own culture; modified in parts here and there, it is true, by contact with Indian and African forms and, even more importantly perhaps, by the interaction that has proceeded under the conditions of the new habitat, but still basically European.

The development of the means of transportation and communication in this region during recent years has been breaking down isolation. At the same time, the inhabitants of this community are still to a considerable extent culturally isolated from the influence of the cities, although economically and politically they are being more and more drawn into the larger society. Mobility, although apparently always considerable and although increasing in recent years, is still comparatively low and literacy is limited. The society is relatively simple and homogeneous and is based largely upon kinship, *compadre*, and status relations. Contacts within the community are almost exclusively primary. Interpersonal relations are informal, in-



MAP 2.—The village of Cruz das Almas, showing the distribution of house types and the location of the church, chapels, cemetery, vendas, botecquins, bakery, horseshoeing shop, prefeitura, and jail. Indicated also are the location and arrangement of the sede (or headquarters) of the fazenda that lies at the edge of the village.

timate, intense, sentimental, relatively complete and permanent and an end in themselves. Individuals tend to meet one another at most, if not all, points in their lives and intimately to share each other's experiences. Customs ordinarily have the weight of many years of repetition behind them; they are relatively uniform and crystallized into patterns known and, in general, accepted by all members of the community. The number of Alternatives, in the sense in which Linton has used that concept, is limited (Linton, 1936, pp. 273-275). The culture thus has a high degree of equilibrium and stability and channels pretty largely the habits of all individuals. It is handed on from generation to generation principally by way of spoken language and other simple gestures.

Consequently, one finds here a relatively high degree of social solidarity and stability and a cor-

responding minimum of social change. The society, the culture, and the personalities whose interaction constitutes the society and not only is conditioned by the culture but also produces it, are relatively well integrated. As is therefore to be expected, indices of social disorganization are almost lacking, there is a maximum of personal accommodation, a minimum of change in the habits of the individual during his lifetime and consequently a minimum of individualization and personal disorganization. Although these general statements not only will be elaborated but also, quite necessarily, considerably qualified in the course of this account, it may be said that we are dealing here with a society which is predominantly characterized by primary relations, a still largely folk culture, and personalities ordinarily well integrated.

ROOTS IN THE PAST

An account of the past in this community can be given only, with any adequacy, after a thorough sifting by historians and other scholars, of the documentary evidence available in Brazilian and Portuguese archives. Some of this arduous labor has already been undertaken by Brazilian writers. Interest has been centered, however, at least so far as this area is concerned, either in the biography of famed personages or the details of governmental or ecclesiastical administration. It is to be hoped that the comparatively recent shift in attention among Brazilian scholars—a shift evident in varying degrees in the work of such men as Capistrano de Abreu, Pandiá Calogeras, Gilberto Freyre, Roberto Simonsen, Caio Prado Junior, Affonso de E. Taunay and Sergio Buarque de Hollanda—will afford in the near future a more adequate understanding of the underlying ecological, economic, and sociological processes throughout Brazilian history, of which the personages involved are the symbols and instruments.

In the course of this study, available published materials were consulted and as much time and energy as possible also were given to looking over ecclesiastical and governmental documents in local

depositories.² At least the general outline of the past in this area seems to be clear.

The present population is derived from Indian, European, and African sources, extensively mixed together. The earliest inhabitants of whom we have record were the Guayaná and the Carijó. They are known to have been in the region at the time the first Portuguese found their way up from the coast on to the "plains of Piratininga" where the city of São Paulo was founded. It is probable that one or both of these groups hunted, fished, and perhaps had small clearings for planting in the precise area under study. Stone implements, evidently once used by Indian inhabitants, are occasionally found in the community.³ Place names are predominantly from the language the Carijó spoke.

Carijó is the name by which the Guaraní were first known to Europeans (Metráux, 1948, p. 69).

² Some of the records of this area probably were destroyed in a fire which occurred in the *Camara Episcopal* of São Paulo in 1880.

³ Due to the belief, however, that these objects are *pedras de raio* (literally, "stones from the lightning"), they are feared by the inhabitants and, upon being found, are usually taken immediately and thrown into the river or a nearby creek. Rarely does one of these implements come into the hands of someone who understands its origin and preserves it. (See fig. 1.)

The latter term came into general use only in the seventeenth century. At the time of first contact with the Europeans, the Carijó occupied the Brazilian coast from what is now Rio Grande do Sul, north to the southeastern tip of what is now the State of São Paulo, a point immediately south of the community under study. From the coast, they spread westward to the Uruguay, Paraguay, and Paraná Rivers. They are said to have been less warlike than the Tupí. Either they did not practice ritualistic cannibalism as did the Guaraní elsewhere, or early had abandoned this custom in southern Brazil (Von Ihering, 1906, p. 15). There is a record of the Carijó having taken refuge with the Portuguese at São Paulo in 1609 after being "cut to pieces" by the Spanish (Actas da Camara, etc., 1596-1622, p. 239).

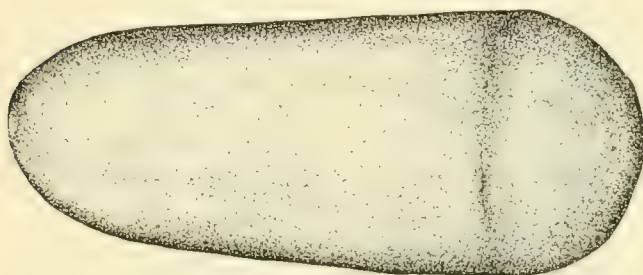


FIGURE 1.—Polished stone celt ($\frac{1}{2}$ natural size), used by indigenous Indians. Called by present inhabitants *pedra de raio*, or "lightning stone."

The first Portuguese to penetrate interior from the coast found the Guayaná living on the *planalto*. In old documents, they are variously referred to as Guayanáz, Guayná, Goayanaz, Goyaná, and Wayannaz.⁴ Like the Carijó, they are reported less given to warfare than the coastal Tupí. They materially aided the Portuguese who founded the city of São Paulo. Tibiriça, one of their chiefs, played an important role in the affairs of this Portuguese settlement.

As late as the last century, the term Guayaná was still being used in the State of São Paulo to refer to Indians living at Itapeva and Faxina (Von Ihering, 1906, pp. 10, 23). In 1882, however, Telemaco Borba introduced the term "Caingang" to refer to these and other related non-Guaraní peoples in São Paulo and the other southern states

of Brazil. He was shortly followed in this usage by Visconde Escragnoles Taunay and other scholars, and the term Caingang has now come into rather general use.

Shortly after the Portuguese began to establish themselves on the plateau where the city of São Paulo subsequently grew up, a number of Guayaná withdrew from close contact and settled in villages at Pinheiros and São Miguel, the former of which is now a suburb of the metropolis. In 1580, other Guayaná, fleeing from a severe epidemic⁵ of dysentery at São Paulo which was killing off large numbers of Indians, settled in four different localities at varying distances from São Paulo, around each of which subsequently developed a present-day town. One of these settlements was located on the Anhemby (today Tietê) River a few miles from the community under study. Some time later, the Jesuits made of this village an *aldeiamento*, or one of their centers for catechizing the Indians, similar to those around which grew up the present-day towns of Carapicuíba, Mboi (Embú), Itapeceerica, Itaquaquecetuba and São João de Peroibe in the same State (Arouche de Toledo Rendon, 1863, p. 297). In 1612, 600 Indians were reported to be living there. In 1633, however, as a part of the struggle then going on between the Jesuits and the other colonists, the *aldeiamento* was assaulted and "the *padres* expelled, the furniture of the church and school broken up and thrown away, the chapel closed and the Indians carried off." Subsequently reestablished at a nearby site under Portuguese Government supervision, this village in 1700 had 493 Indians and was the largest of six similar settlements in the vicinity of the town of São Paulo.

The Portuguese first appeared on the coast at São Vicente in 1531. Their superior techniques, especially of warfare, soon made them ecologically dominant in the region. Subsequently, the native Indians were employed, either in exploring the interior, where they acted as guides, hunters, carriers and warriors, or to care for fields and livestock on the farms of European settlers. Opposition was met with superior force, and hostile Indians were either destroyed or expelled further and further into the interior. A system of slavery emerged whose abuses both state and

⁴In published accounts, the "z" is sometimes substituted by "s." In modern Brazilian spelling, the "y" has been substituted by "i."

⁵Another serious epidemic among native Indians is reported in 1635.

church subsequently sought to regulate. The competition between the Jesuits, who wished to settle the Indians in villages under their constant instruction, and the other European colonists, who desired slaves to work their fields or to aid in the exploitation of the interior, eventually led to serious opposition, violence, and the final expulsion of the Jesuits from Brazil in 1759. The Portuguese Government, hampered by distance and inadequate means of communication, also sought to regulate the relations between Indians and colonists by settling the Indians in *aldeias* under appointed administrators or apportioning them to individuals as *administrados* for whose well-being they presumably were responsible to the crown.

Miscegenation between Portuguese and indigenous Indians began with the arrival of the Europeans and continued extensively until the native peoples, as a distinct group, had disappeared from the region. From this race mixture, there gradually emerged what Paulo Prado has referred to as "a new race," the *Paulista*. (Prado, 1934, p. 21.) As in other parts of Brazil, amalgamation continued, although perhaps to a more limited extent, with the subsequent importation of Africans. It is probable that in few places in the world has the fusion of peoples of diverse racial stocks proceeded so continuously and on so extensive a scale as in this country (Pierson, 1942, especially chs. 4 and 5).

When the first Europeans actually settled in the specific area under study is unknown. In 1561, the Tietê River was descended from São Paulo by an armed expedition sent out by the governor-general of Brazil, Mem de Sá, in which the famed Jesuit missionary, Padre Anchieta, participated. This expedition passed along the margin of the present community and reached Porto Feliz below it. With the second visit to São Paulo of Mem de Sá, in 1567, the distribution of lands to Europeans was speeded up.

In 1590, gold was discovered on the margin of the present community and this led "to a veritable mania of mining," as one writer puts it. "Fascinated by gold," Europeans got themselves *batéas* and set to work panning the rivers, creeks, and "even the washings of rain water" in the vi-

cinity.⁶ Imaginations were fired by this and other similar discoveries in the region. In March 1607, an expedition "for the discovery of gold, silver, and other metals" composed of "forty or fifty" Europeans and "a large number" of Indians set out to penetrate as far as possible into the interior.

In 1619, three land grants were made to settlers in or near the area under study. At that time, mention was made of Europeans already living in the area. Following a severe feud between two São Paulo families, the Pires and the Camargos, which broke out in 1641, several "notable personages" from the defeated family settled on the Tietê River near this area and land taken up by these settlers, either at that time or later, extended over into the present community. One man is reported to have had 500 Indian slaves, two others to have had 100 each and a fourth, 115. The town which grew out of this settlement subsequently came seriously to rival the town of São Paulo. As one writer put it, "they had everything which São Paulo had: nobles, Indians, mixed bloods, a church and a *Camara*."⁷ Vigorous opposition soon developed on the part of residents at São Paulo whose leaders sought unsuccessfully to prevent this settlement from being recognized as a *vila*, of equal standing with their town. These early settlers were soon joined by others, several of whom bore names which subsequently became famous in *Paulista* history.

The economy of the region, previous to the coming of the Europeans, was largely extractive in character, although to some extent also agricultural. Fish were taken from the streams and game and fruits from the virgin forest. Patches of timber were cleared, fired, and used for planting.

The Carijó made considerable use of traps. They are known to have grown maize, beans, peanuts, *cará* (*Dioscorea* spp.), papaya, wild pineapples, tobacco, and sweet manioc. They are said to have had a dozen recipes for preparing maize. Salt was not used. Tobacco was smoked in clay pipes. A *tambetá* made of resin was worn in the upper lip. Fur mantles were used. Each fam-

⁶ Local residents recount an unsuccessful attempt subsequently made with primitive instruments to straighten a bend in the Tietê River and thus expose the bed for a considerable distance for gold panning.

⁷ Legislative body.

ily occupied a separate hut. Wooden mortars were made of logs. The platform bed and mat were used for sleeping. Pottery was limited and simple.

The Guayaná collected the *jaboticaba*,⁸ *pitanga*, *araticum*, and papaya, the roots of the *caraguatá*, pine nuts, wild pineapples, honey, and the larvae of bees. They hunted the wild pig, *paca*, *cavivara*, armadillo, and several kinds of birds. The hands, bows and arrows, and a two-pronged spear were used to catch fish. They are said to have been improvident and to have consumed crops as soon as they matured. Salt was unknown to them and *malagueta* berries were used instead. Beer was a favorite beverage. They did not have the hammock and slept on the ground. Coverings of coarse cloth were made from the fiber of the *urtiga brava* for use in cold weather. Large baskets were made from split bamboo and smaller baskets from strips of *taquara*. The latter were coated with wax to make them impervious to liquids. Pottery was quite simple.

The Europeans and their descendants who settled in the area of the present community lived principally from agriculture and the raising of small numbers of livestock—cattle, hogs, sheep, and poultry—all of which the Europeans had introduced into Brazil; and this means of livelihood, influenced in certain details by practices passed on from Indian associates or ancestors, has predominated from that day to this. By the middle of the seventeenth century, at least 50 families were settled on farms in this area. Most of these were small properties; large holdings were not common anywhere in the State of São Paulo previous to the development of the coffee *fazendas* in the nineteenth century (Taunay, vol. 4, p. 167). On one of the larger of these farms there were being grown in 1761, maize, beans, peanuts, cotton, rice, manioc, and sugarcane, the latter of which was in part turned into sugar or *aguardente*.⁹ A small quantity of wine also was produced.

From farms in this area, several famous *bandeirantes*, with their Indian assistants, set out upon those far-ranging expeditions which made known to Europeans vast areas in the center of the South

American continent. Even in the *bandeiras* that were organized at São Paulo there are said "always to have been men from this area, well-known and respected." Expeditions were made to the famed silver mines of Potosí, in Peru; to "Guayra and the Jesuit *reducciones* of the seven peoples" in Paraguay, whence were brought back "Indian slaves, burros and goats" until, by 1638, these Indian settlements under Jesuit control had been wiped out; to Goiás whence, in 1661, the remnants of three Indian tribes referred to as Guayanazás, under three "kings," Sondá, Gravatáhy and Tombú, who had fought among themselves, were brought back and held as slaves in this area; into southern Minas Gerais where gold was sought for several years before finally being discovered in 1698 and where diamonds also were discovered in 1723; and into Mato Grosso where gold was discovered in 1718.

A *fazendeiro* in this community added materially to his already considerable wealth by loaning money at interest to *bandeirantes* and furnishing the miners among them periodically with supplies. His men took pack trains "attended by from one to two hundred slaves" and carrying such articles as meat and marmalade from his own *fazenda* and salt, sugar, firearms, and iron implements imported from Portugal, Rio de Janeiro, or Bahia. He also sold cloth, shoes, hats, salt, wheat, drugs, iron tools, and fresh beef to his neighbors. On his *fazenda* were artisans who made nails, screws, locks, utensils, and iron tools.

Several chapels were erected in the community at different times during the colonial period, at least four of which became important centers of collective life. One of these chapels grew into the present village church. On the site of another, there still stands a modest chapel, in considerable disrepair. A third chapel has recently been restored by the *Patrimônio Histórico* of Brazil. Of a fourth, no trace exists today.

The first chapel known to have been built within the limits of the present community was erected in 1653 about a mile from the site of the present village. It was dedicated to Nossa Senhora da Piedade and was for many years the center of the local parish. It was built by a settler from Pernambuco, who as a young man had wasted his inheritance in Lisbon and instead of returning home had come to Rio de Janeiro, then to Santos and São

⁸ For the identification of these local terms, see The Mata, p. 16, Wildlife, p. 17, and Wild Fruits, p. 34.

⁹ See Distillation of Pinga, p. 89.

Paulo, and finally to this community where he became a *fazendeiro* "with a large area planted." He is reported to have been a musician, "unparalleled in playing the viola and *violão*." His son was a noted *bandeirante* who became rich in the gold mines of Minas Gerais. His grandson, a *padre*, was so attracted by the tales of the *bandeirantes* that he eventually gave up the cloth and became a famed *bandeirante* himself, who took gold in the mines of Cuyabá, in Mato Grosso, and possessed at his death, it is said, 17,400 *oitavas* of gold.¹⁰ In 1772, this chapel was reported to be in serious disrepair. Today it has disappeared. The image of Nossa Senhora da Piedade, however, is preserved in the village church. Older residents on the farms sometimes still refer to the village itself as "Piedade," although it has long been known more generally under another name.¹¹

The second chapel to be built in the community was dedicated to Nossa Senhora da Conceição. It was erected in 1677 by the *fazendeiro* referred to above, who furnished capital to many *bandeirantes*, especially for the extraction of gold in Minas Gerais, and helped supply them with food, tools, and other necessities. At his death in 1713, the farm became the property of the Jesuits and was used by them for many years apparently as a retreat, although it is possible that they also had a school here. A legend of a secret tunnel, similar to those legends common to establishments in Brazil occupied by the Jesuits at the time of their expulsion, exists here also. Current tradition insists that the other end of this tunnel was located in a church an unbelievable 10 miles away. *Festas* are still held occasionally at the present chapel, in which the image of Nossa Senhora da Conceição is still kept. She is thought to be especially efficacious in bringing rain in a period of drought. (See section on *Santos*.)

The third of these chapels was erected the following year (1678) on the margin of the present community. It was built by one of the men who fled from São Paulo at the time of the feud between the Pires and Camargos, referred to above. He was married to a daughter of a famous Indian fighter known as "the terror of the Indians." His father had been a Portuguese from Setúbal.

Although he himself was not a *bandeirante*, at his death in 1691, he is said to have possessed ware made from silver, which had been taken in ventures he had organized, weighing "more than 40 *arrobas*."¹² This chapel also was dedicated to Nossa Senhora da Conceição. Years later it became a virtual ruin but was subsequently reconstructed and, more recently, again restored by the *Patrimônio Histórico* of Brazil (pl. 16, *b*). On the floor, one at each side of the altar, are two figures, each about 3 feet high, which local residents identify as "Adam and Eve" (pl. 16, *e*). A villager says they were once used to hold up the altar.¹³

The fourth of these important early chapels was erected in 1701, on the *fazenda* of a *capitão-mór*, "one of the most noble and richest men of his time," who "had numerous slaves." At one time, when the French threatened to take over Rio de Janeiro permanently, he armed 200 men at his own expense to help expel them. He also took gold in the mines at Cuyabá. The chapel was dedicated to Nossa Senhora da Penha¹⁴ and has grown into the present village church. The original building was reconstructed at least three times: in 1772, 1814, and 1833. The present building dates from 1881. Local residents speak of a pyx of gold once owned by this church, which weighed 4½ kilos (9.9 pounds). A *padre* who officiated here from 1856 to 1888 and who was best known by his nickname of *Araçá*, became quite famous in the community. An *homem de côr*¹⁵ from Santos, he is said to have been "worshiped by his parishioners." He owned land on which were "large plantings of coffee, maize, sugarcane and cotton, as well as *engenhos* for grinding cane and *olarias* for making brick." From the production of this *fazenda*, generous gifts were made to needy families.

When the first African was brought into the area under study, or even into the region, is unknown. Due to the absence of plantation agriculture such as developed in the Reconcavo of Bahia, the coastal region of Pernambuco and the area around Campos in the State of Rio de Janeiro, or of extensive gold-panning operations such as

¹⁰ 2,175 ounces.

¹¹ Of a second chapel, erected by the grandson at an unknown date and dedicated to Nossa Senhora do Pilar, there also is no vestige left today.

¹² 1,280 pounds.
¹³ Said another villager, "They are a *casar de índio* (an Indian man and his wife); can't you see that their color is dark, not light?"

¹⁴ Of another chapel which this man is reported to have erected near the Tietê River on his *fazenda* and dedicated to Nossa Senhora de Nazareth, no trace is left today.

¹⁵ "Man of color"; that is, a Negro.

those in southern Minas Gerais, the need for African labor was less felt. At the same time, contrary to what some writers have thought, Africans and their descendants have long been in this region in considerable numbers. In the will of a *fazendeiro* who died in 1691, a mulatto overseer, his wife, and a mulatto woman were freed, and the owner instructed his heirs not to sell other Negro slaves and "to treat them with that love and charity which I always showed toward them." An inventory taken in 1713 of the property of his son, whose house stood about 3 miles from the place where the village is now located, listed among this man's possessions 101 Negro slaves besides 204 Indian *administrados*. A subsequent inventory taken in 1760 listed on this *fazenda* at that time 102 Negro slaves, in addition to 101 Indian *administrados*.¹⁶

The parish marriage records for this community, which are now on file at the *Curia Metropolitana* in São Paulo, list 27 marriages for the 4 years 1720-23. One marriage was that of a man and woman referred to as *gentio de Guiné*, a generalized expression for persons born in Africa. The participants in four other marriages were all listed as *escravos*, or slaves. If this term refers to Negroes, as is quite likely, since the same registry also uses the terms *administrados* and *Carijós*¹⁷ which presumably refer to Indians, eight other marriage partners were Negroes. In addition, an *escravo* is listed as having married a *Carijó* and a *Carijó* as having married a mulatto woman. Of the 54 marriage partners listed in these records, therefore, twelve, or over one-fifth, were probably of African descent.

Incomplete records of deaths in the parish during the 48 years from 1732 to 1779, inclusive, list 65 *escravos* among 283 entries. Six persons are listed as *forros* (freedmen) and one as a *parda*,¹⁸ presumably a mulatto woman. Since the term *gentio da terra*, or literally "pagans of the country," often employed in early documents to refer to Indians, also appears in these records, in addition to the term *administrados*, and there are still

such other entries as "an Indian man from the *aldeia* of Baruary," "an Indian woman from the *aldeia* of Sam Joseph de Jactarez" and "a Boróro Indian" (in two cases), it seems reasonable to assume that 71, or a little more than one-fourth, of these 283 deaths were of persons of African descent.¹⁹ Among other individuals mentioned in these records, such as the parents, wife, husband, or other relative of the deceased, 63 are referred to as *escravos*, 8 as "freedmen," 2 as *pardas*, and 1 as a *mulata*.

In the early nineteenth century, a considerable portion of the population in the community must have been African. The marriage records for the parish list 124 marriages of Negro slaves between the years 1819 and 1862. When one considers that the condition of this registry suggests that several sheets are missing, and that it is also likely that not all slaves of marriageable age were formally married and listed in the registry, it would seem reasonable to conclude that there were a considerable number of Africans and their descendants in the community at that time.

In 1766, a decree of the Portuguese Government ordered a listing of "all persons, nobles, plebians, mixed bloods, and free blacks" by the *Companhias de Ordenança* and, beginning the following year, censuses were taken periodically for several decades. The first of these censuses listed for the community under study, 53 heads of families who gained their living from planting, 5 from spinning, 3 from weaving, 2 from retail activities, and 1 each from trading, carpentry, and tailoring. One "lived from his lands" and another was a *capitão de mato*.²⁰ There were at that time 215 *fogos*²¹ with 542 free men and boys and 505 free women and girls, of whom 24 were *agregados* (hired laborers).²²

In 1835, a census which had been ordered taken by the Provincial Assembly of São Paulo listed in the *município* of which the community under study

¹⁶ In these records, the indication *de nasçam Mina* (of the Mina "nation") appears seven times; *de nasçam Angolla*, four times; *de nasçam Ganguella*, twice, as also *de nasçam Banguella*, both of which are probably alternate spellings of Benguela; and the more general term *gentio* (or *nasçam*) *de Guiné*, four times.

²⁰ A "bush captain" hired to track down fugitive slaves.

²¹ Literally, *fires*; i. e., households.

²² The free population included 542 men and boys, 505 women and girls. Three age groups were given for each sex, the categories being somewhat different. Males were listed as "over 60" (44), "14 to 60" (277), and "under 14" (221); females as "over 50" (49), "12 to 50" (292) and "under 12" (164).

¹⁶ The *administrados* were furnished houses in which to live and plots of land on which to plant crops for their own use. They were expected to give 3 days' service a week in return for the use of these dwellings.

¹⁷ Some time after the arrival of the Europeans, the term *Carijó* apparently became in this region a generalized expression to refer to any Indian.

¹⁸ A term which in general means mixed blood, especially of African and European origin.

was then a part, 5 persons as being musicians, 14 as knowing carpentry, 7 tailoring, 6 shoemaking, 3 tinsmithing, and 1 wood carving. All other heads of families were engaged in agriculture. The principal planting is given as maize, beans, and rice.²³ There were in the *município* 646 households with 4,196 persons, of whom 1,977 were men and boys and 2,219 women and girls. Of these, 131, or 3 percent, were listed as "Indians"—60 men and boys and 71 women and girls; and 1,296, or 31 percent, as *captivos* (slaves)—680 men and boys and 616 women and girls. Of the slaves, 683 (323 men and boys and 360 women and girls) were given as "Brazilian-born blacks"; 291 (186 men and boys and 105 women and girls) as "blacks from Africa;" and 322 (171 men and boys and 151 women and girls) as *pardos*. Of all blacks, 80 percent were slaves; while of the *pardos*, 76 percent were free.²⁴ Unfortunately, these data are not broken down by subdivisions of the *município* so that one may know what portion lived in the community under study.

In 1850, the population of the community was given as 1,270, of which 29 percent were slaves.²⁵ In 1886, there were still 158 slaves, 91 of whom were men and boys, and 67 girls and women. Of these, 38 were married and 4 widowed. Four were slaves in the village and the others were on sur-

rounding farms. Nine persons had been born in Africa. Only 14 other individuals had not been born in Brazil, 8 of whom were Portuguese and 6 Italian. There were 531 houses with an average of 4.6 persons per household. All but 22, or 4.1 percent, of the houses were owned by the persons living in them.²⁶

In the Federal census of 1890, there were listed for the community 2,202 persons, distributed as follows:

	Masc.	Fem.	Total	Pct.
Whites.....	293	269	562	25.5
Blacks.....	317	260	577	26.2
<i>Caboclos</i> ¹	161	165	326	14.8
<i>Mestiços</i>	342	395	737	33.5
Total.....	1,113	1,089	2,202	100.0

¹ The precise meaning of this term is not clear. It has been used at different times in Brazil in four different ways: to refer to (1) Indians in a tribal state, (2) assimilated or partially assimilated Indians, (3) descendants of Indians, mixed in varying degrees with whites and (in certain areas) with Negroes and (4) isolated, nonliterate rural inhabitants.

In more recent years, a few persons born in Europe have migrated to the community. According to the Federal census for 1920, of a total population of 4,310, 101 persons, or 2.3 percent, were born outside Brazil. Of these, 47 were Italian (35 males, 12 females); 27 were Portuguese (21 males, 6 females); and 27 were Spanish (22 males, 5 females). According to the State census of 1934, taken 14 years later, 266 persons, or 7 percent of the population, were foreign-born. Of these, 64 were Spanish, 56 Italian, and 52 Portuguese. There were also 73 Japanese, 6 Syrians, 2 Germans, and 13 persons "of other nationalities."²⁷ No comparable data are available from the 1940 census.

A number of present-day residents are descended from families which moved into the area two to three generations ago from a community about 25 miles to the south. Several families from another community, about 40 miles to the east, are also said to have moved into the area around 1916.

A road linking the community with the coast by way of São Paulo has existed since shortly after the first settlement in the area. By the middle of the eighteenth century, the town of São Paulo was the hub of six different roads fanning out like the spokes of a wheel. One of these passed near the

²⁶ The sex division was given as 1,175 men and boys and 1,290 women and girls.

²⁷ At the present time, there are no Syrians or Germans in the community and only two families of Japanese.

²³ A comparatively small acreage was in manioc. Coffee production was reported as 55,000 *arrobas* (881 tons); cotton as 1,151 *arrobas* (73.6 bales). Comparatively small quantities of sugar (10.8 tons) and *pinga* (154 gallons) also were produced that year. There were 354 head of cattle and 63 horses.

²⁴ During this year, 195 births were registered, 70, or 36 percent, of slaves. Of all births, 102 were of boys, 93 of girls; of the slaves, 32 were boys, 38 girls; of the free-born, 70 were boys, 55 girls. Deaths totaled 114, or 81 less than births, of which 35, or 31 percent, were of slaves. Of all deaths, 52 were of masculine sex, 62 of feminine; of the slaves, 18 were masculine, 17 feminine; of those who were free, 34 were masculine, 45 feminine. There were 35 marriages, of which 6, or 17 percent, were of slaves.

²⁵ In the free population, there were 433 men and boys, 470 women and girls; in the slave population, 185 men and boys, 182 women and girls. The distribution by age was as follows:

Age	Free		Slave		Total
	Males	Females	Males	Females	
80-90.....	4	3	—	—	7
70-80.....	20	17	1	2	40
60-70.....	34	29	14	15	92
50-60.....	49	33	18	21	121
40-50.....	60	58	24	23	165
30-40.....	76	84	31	27	218
20-30.....	75	78	30	26	209
10-20.....	55	86	34	32	207
0-10.....	60	82	33	36	211
Total.....	433	470	185	182	1,270

village on the way to Itú and the west. Another went down the rim of the *planalto* from São Paulo to Santos. A third extended northeastward from São Paulo along the Paraíba Valley toward Rio de Janeiro, with a branch into southern Minas Gerais. A fourth went northward into Minas Gerais by way of Sapucaí and Camanducaia. A fifth led northwestward through Campinas and Franca into Goiás and a sixth extended south and west to Curitiba in Paraná.

The *Estrada Imperial* (Imperial Highway), which linked São Paulo with Itú, is referred to by present inhabitants as having once been "the best road in the State of São Paulo." It passed along the ridge where the village cemetery is now located. It is said to have always followed the contours of the terrain, winding along the heights and seeking to avoid the necessity for bridges. Local residents still speak of a journey once made by the Brazilian Emperor, Dom Pedro II, along this road.

A railroad extending west from São Paulo and passing through São José dos Patos, 9 miles to the south of the village, and Boa Vista, 11 miles to the southwest, was inaugurated in 1875. A bus line from São Paulo which passed through Boa Vista was established in 1928; and in 1935 another bus line which passed through Piracema, 7 miles to the northeast. The road linking these towns with the village, however, long were little more than trails for pack train and oxcart. Although improved somewhat following the introduction of the truck into the area about 20 years ago, they still were barely passable to motor vehicles until quite recently. The road to Paratinga, which was the first and for a long time the most important link of the community with the outside world, is now falling into disuse.

Previous to the coming of the truck, the carrying of produce out of the community and of such necessities as salt and cloth into it, were by pack train and oxcart. Three persons are still living in the village who, when young men, were *tropeiros*, or drivers of pack trains. The role of this specialist in Brazil, as a means not only of exchanging goods but also of communication and news, has not yet adequately been studied. Probably more than any other agent, the *tropeiro* for centuries helped to reduce isolation in the vast Brazilian interior.

On a *fazenda* which lies at the edge of the village is the entrance to an old mine said to have been worked for gold by the Jesuits in the eighteenth century. Nearby is another mine where shafts were sunk and ore was extracted from 1926 to 1933. A small plant for sifting out ore concentrate, with a capacity of 15 to 20 tons daily, was erected, and the concentrate was shipped to the United States for smelting.²⁸ High costs and a low return led to the closing of the mine in 1933 and the subsequent removal of the buildings.

Still standing in the community is a house constructed in 1688. Its beams are of *peroba* and "as firm today as when first laid," says a village carpenter. The walls are of *taipa*, or earth tamped down firm and solid. The floors, originally of earth, are now of brick; the roof is of tile.

Administratively, the community was a *freguesia* (parish) of one *município* from 1653 to 1844 and of another from 1844 to 1874; a *município* in its own right from 1874 to 1934,²⁹ and a *distrito* of a neighboring *município* since that date. It appears, however, that the actual area involved has remained constant.

In this area, then, the principal occurrences in the past have been as follows: (a) Contact between indigenous Indians, migrant Europeans (principally Portuguese), and imported Africans; (b) the development and eventual passing of a system of slavery involving, first, Indians, and, later, Africans; (c) extensive miscegenation and the gradual amalgamation of these three basic races into a new hybrid stock, in the course of which the Indian, as a distinct biological group, has disappeared and the Negro is apparently in the process of disappearing; (d) the appearance in comparatively recent years of a limited number of Europeans from countries other than Portugal, especially Spain and Italy, and also of a few Japanese, all of whom have either been assimilated into the local society or have moved on elsewhere; (e) the migration to the area of several families from nearby communities; (f) an economy which originally was primarily extractive and, later, predominantly agricultural, although

²⁸ A ton of ore is reported to have yielded 126 gm. of gold and 134 gm. of silver. Included also were:

Lead.....	6.1 percent
Copper.....	.5 percent
Zinc.....	3.8 percent

²⁹ The *camara*, or legislative body, was dissolved in 1890.

the area also at one time produced some gold and, more importantly, served as a base of departure for the extraction of large quantities of gold, silver, and diamonds in other regions, as well as the procural of Indian slaves; (*g*) the maintenance, since shortly after the appearance of the Portuguese, of effective political control of European character; (*h*) the effective assimilation of Indians and Africans and the gradual disappearance of first the Indian cultures, then the African cultures, until today the most diligent and persistent research is able to turn up only a few vestiges of

either group of cultures; (*i*) a *bandeirante* movement which, using the community as a base, explored vast areas of the central portion of the continent; (*j*) a close identification of collective life with religious activities; (*k*) a limited reduction of a general condition of isolation from the influence of the cities by means of the far-voyaging *tropeiros* and, in later years, the truck and the railroad, although even after the appearance of these latter agencies, the condition of local roads long continued as a rather effective barrier to communication.

THE ECOLOGICAL BASE

When considering any society or culture, one not only has to trace the roots which run back into the past but also to give attention to certain basic physical and biological facts. Obviously no society or culture emerges without the agency of a population group, the interaction of whose members constitutes the society and produces, as well as is conditioned by, the culture. Moreover, this population group always occupies a habitat, in terms of which its struggle for existence, which underlies and to some extent conditions both collective behavior and cultural forms, is carried on. Any account of a given society and culture which seeks to be realistic must therefore take into consideration those elements of a physical and biological character with which the inhabitants have had to deal. It must also take into consideration the techniques which the inhabitants have developed to reduce competition with other living forms occupying the same habitat, and to utilize natural resources to supply basic needs; techniques, some of which are material in character but others of which involve knowledge, attitudes, and behavior, especially as these enter into and cause to function economic processes and institutions.

HABITAT

The general character of the area is that of a one-time plain, now extensively eroded into a profusion of furrowed, round-topped hills, with an occasional wide valley. As, from a point of vantage, the eye roams over the area, the surface seems almost continually to shift, now rising, then falling, then rising again. The ground sometimes

falls away quite sharply, the slope in a few cases becoming as much as 45° or 50°. The hills at times reach 400 to 500 feet in height. An occasional large rock or, more rarely, a huge granite boulder or a series of boulders, stick up out of the generally porous soil. The altitude varies from about 2,300 to 3,600 feet, with an average around 2,500.

Seven miles to the east of the village, in sharp perspective when the atmosphere is clear, or dimly seen through haze or mist, Mt. Itacolomí rises some eight hundred feet. To the northwest, approximately an equal distance away, the Morro do Palambí, a long flat-topped ridge, over which come many of the rainstorms which reach the village, dominates the sky line for the third part of a quadrant.

SOIL

Local inhabitants distinguish between three kinds of soil which they call, respectively, *massapé*, *sangue de tatú*, and *carrascá*. *Massapé* is predominant in the community. It is a dark, rich, porous soil of considerable depth. When wet, it is quite slippery. *Sangue de tatú* or, literally, "the blood of the armadillo," is a reddish soil of medium value. The *carrascá*, which a villager referred to as "land which grows only ferns and *sapé*,"³⁰ is a shallow, clayey soil with some sand. The excellent *terra roxa*, preferred for coffee planting, does not exist here. Land on a steep hillside is called locally *perambeira*.

In 1945, the State *Secretaria da Agricultura* estimated that of the land in the *distrito* of which

³⁰ A coarse wide-bladed grass, used for thatching.

the village is the center, 2,000 *alqueires* (about 12,000 acres) were "very good," 800 "good," 500 "average," 467 "poor," none "very poor," and none "improper for agriculture." Although the categories employed in these estimates are obviously subjective and relative, they do perhaps give some indication of the value for agricultural purposes of the land in this community as a technician thinks of it in comparison with the land in other parts of the region.

CLIMATE AND SEASONS

The climate is that of a subtropical region at about 2,500 feet altitude: ordinarily healthy and agreeable with a minimum of both heat and cold. During the last 23 years, or the period for which complete data are available,³¹ the rainfall has averaged 57.8 inches a year. The heaviest precipitation during this period was in 1931, when 81.4 inches fell; the lightest in 1944, when 36.4 inches fell. These data are presented in table 1.

TABLE 1.—Rainfall, by years, Cruz das Almas community, 1926-48¹

Year	Rainfall (in inches)	Year	Rainfall (in inches)
1926	53.2	1938	61.0
1927	63.5	1939	48.1
1928	59.1	1940	46.4
1929	80.9	1941	54.6
1930	65.7	1942	46.6
1931	81.4	1943	52.5
1932	67.4	1944	36.4
1933	49.5	1945	63.9
1934	54.4	1946	45.8
1935	49.5	1947	73.9
1936	62.5	1948	56.8
1937	56.9	Average	57.8

¹ Source: A private agency. See footnote 31, below.

There are two seasons most often referred to by the inhabitants, the rainy and the dry. The local terms are *tempo das aguas* ("the time of the rains") and *tempo da seca* ("the time of the drought"). The months covered by these seasons naturally vary somewhat from year to year. In general, however, the rainy season begins in December and extends through March; the dry season begins in April, becomes most acute in July, and usually continues through August. In

³¹ Data on rainfall and temperature which are available at the Government station in the nearby seat of the *município* cover only a few recent years. The data presented here were furnished by a private agency which maintains its own station even nearer the village (only about 5 miles away). This agency prefers to remain anonymous. The readings are standard, however, and have a high degree of accuracy.

the intervening months of September to November, inclusive, rainfall usually is not heavy but increases as the weeks pass. These data are indicated in table 2.

TABLE 2.—Maximum, minimum, and average rainfall by months, Cruz das Almas community, 1926-48¹

Month	Maximum rainfall		Minimum rainfall		Average (in inches)
	Inches	Year in which occurred	Inches	Year in which occurred	
January	30.4	1929	3.6	1939	9.7
February	12.9	1927	.5	1926	8.1
March	15.9	1931	1.2	1930	6.6
April	7.0	1937	.3	1933	2.5
May	8.4	1929	.1	1934, 1943	1.9
June	7.9	1945	.0	1936	1.9
July	4.8	1926	.0	1937	1.5
August	5.9	1927	.0	1944	1.8
September	11.7	1935	.4	1944	3.6
October	12.7	1935	.9	1939	5.0
November	14.8	1939	2.5	1926	6.2
December	20.1	1932	3.3	1937	9.7

¹ Source: A private agency. See footnote 31, below.

The rainy and the dry seasons are to some extent also defined by temperature variations. Inhabitants speak of the *tempo do calor* ("the time of the heat") and the *tempo do frio* ("the time of the cold"). The warm season corresponds roughly to the rainy season and the cold season to the dry season. This correspondence, however, is only approximate. The average daily temperature begins to increase in August and September and reaches a maximum in January and February, following which it declines. The decrease is quite gradual until May when it becomes more appreciable and in July the average temperature reaches its lowest point for the year. These data are indicated in table 3.

TABLE 3.—Average temperatures, by months, Cruz das Almas community, 1938-48¹

Month	Average temperature (° F.)	Month	Average temperature (° F.)
January	71	July	58
February	71	August	60
March	70	September	63
April	68	October	66
May	63	November	65
June	59	December	69

¹ Source: A private agency. See footnote 31, below.

The "dry" season, however, is not completely without rain. In fact, the average precipitation for the 5 months of this season, during the 23 years for which data are available, was 9.6 inches each year. The rainfall for the 4 principal months

of the rainy season during the same 23 years, averaged 34.1 inches, with a maximum in December and January (9.7 inches each month) and a minimum in March (6.6 inches). For the 3 months of the intermediate season (September–November), the average rainfall each year during the same period was 14.8 inches, the maximum rainfall being in November (6.2 inches) and the minimum in September (3.6 inches).

The temperature during the 11 years from 1937 to 1948, inclusive, or the period for which complete data are available, ranged from a minimum of 32° F. to a maximum of 97°. The former figure was registered only four times during this period: once each in June, July, August, and September. The maximum of 97° was registered six times during these 11 years: four times in October and twice in December. July, the “coldest” month, had an average temperature of 58° during this period. January was the warmest month, with an average temperature for the 11 years of 71°. These data are summarized in tables 3 and 4.

TABLE 4.—Maximum, minimum, and average temperatures, by years, Cruz das Almas community, 1938–48¹

Year	Maximum temperature		Minimum temperature		Average
	Degrees Fahrenheit	Month in which occurred	Degrees Fahrenheit	Month in which occurred	
1938.....	91	January.....	35	July.....	65
1939.....	95	November, December.....	32	August.....	66
1940.....	97	October, December.....	36	July, August.....	67
1941.....	95	February.....	36	September.....	66
1942.....	93	October, November.....	32	June, July.....	64
1943.....	95	January.....	32	September.....	64
1944.....	97	October, December.....	34	July, August.....	65
1945.....	97	October.....	36	June, July.....	65
1946.....	97	do.....	36	do.....	66
1947.....	95	December.....	36	June.....	64
1948.....	95	January.....	36	August.....	65

¹ Source: A private agency. See footnote 31, p. 14. Original readings in centigrade are here given in Fahrenheit.

Average temperatures, however, are not an accurate index of actual climate in the area. Changes in temperature during the same day are often considerable. Within the space of only a few hours, abrupt declines may bring discomfort to persons without adequate clothing or shelter. These sharp changes are due in part to the shifting of the large air masses, especially those of the south polar and the Amazon regions, which to a considerable extent are responsible for the climate. These abrupt changes more often (and usually more appreciably) are due, however, to the cool-

ing of the earth's surface at this altitude after nightfall. During the “winter” month of July 1947, for example, the average variation in temperature per day was 23.1° F.; the maximum variation was 38°; the minimum variation was 9°. During the “summer” month of January, a half year later, the variation per day was similar: an average variation of 21.6° F.; a maximum variation of 34° (on 3 different days); and a minimum variation of 6°. These data are indicated in table 5.

TABLE 5.—Daily variations in temperature (° F.), sample months in winter and summer, Cruz das Almas community, 1947–48¹

Day	July 1947			January 1948		
	Maximum	Minimum	Variation	Maximum	Minimum	Variation
1.....	79	43	36	90	61	29
2.....	77	43	34	93	59	34
3.....	77	48	29	91	59	32
4.....	68	48	20	91	64	27
5.....	70	57	13	93	59	34
6.....	72	57	15	93	59	34
7.....	72	50	22	95	64	31
8.....	75	50	25	91	64	27
9.....	63	54	9	86	63	23
10.....	51	41	13	82	63	19
11.....	66	43	23	72	66	6
12.....	72	45	27	82	64	18
13.....	63	45	18	81	64	17
14.....	55	45	10	81	64	17
15.....	57	43	14	81	66	15
16.....	64	50	14	77	64	13
17.....	68	50	18	82	64	18
18.....	72	50	22	82	64	18
19.....	88	50	38	79	64	15
20.....	73	48	25	81	64	17
21.....	68	50	18	79	64	15
22.....	75	50	25	81	68	13
23.....	75	50	25	86	68	18
24.....	75	49	27	91	64	27
25.....	77	46	31	86	64	22
26.....	77	46	31	88	64	24
27.....	79	46	33	88	64	24
28.....	61	46	15	88	64	24
29.....	72	50	22	88	64	24
30.....	75	48	27	86	66	20
31.....	82	45	37	81	66	15
Average.....	71.0	47.9	23.1	85.3	63.7	21.6

¹ Source: A private agency. See footnote 31, p. 14. Original readings in centigrade are here given in Fahrenheit.

It is possible that the climate has changed somewhat in the last quarter century. Statistical data, however, are lacking either to confirm or to deny this supposition. The inhabitants maintain that “20 or 30 years ago” it was colder in the “cold season” and warmer in the “warm season.” Said an informant, “A basin of water left out on the eve of São João³² used to have ice in it by morning; today, it has only water.” It is also maintained that rainfall was heavier before the timber was cut off. Farmers allege that it is more diffi-

³² The principal festa, celebrated each year on June 24.

cult to predict rain now than formerly. They say the weather is now *móle* ("weak"; that is, inconstant).

In general, however, the climatic conditions of the area still readily support the adjustment which the inhabitants have made to their habitat in developing agriculture as the principal means of subsistence. Rainfall is usually adequate during the growing season, although occasionally crops may be in need of moisture for a comparatively brief period of drought. Hail and ground temperatures below freezing are extremely rare, and sleet and snow are unknown. The soil in general is fertile. The principal disadvantage is that planting must often be done on hillsides, the slopes of which at times become quite steep. This condition of the terrain obviously also favors erosion.

WATER SUPPLY

The community has an abundant supply of water. Numerous brooks and rills, all of which carry clean, clear spring water, find their way down through the hills into a number of creeks which flow to the nearby river. Farmhouses are ordinarily located near one of these streams which have never been known, at least within the memory of present residents, to go dry. In the immediate vicinity of the village are five creeks: one which flows along the edge of the village, another only a quarter of a mile to the southwest, a third three-fourths of a mile to the north, a fourth 2 miles away to the east, and a fifth 2 miles to the west.

An occasional well is dug to tap subsurface water. At present, however, there is only one well in the village. It is located at the rear of a villager's house, about 30 feet from the kitchen door and supplies his family and that of a neighbor. It is 26 feet deep and took a month to dig. The level of the water maintains itself at from 4 to 6 feet from the bottom of the excavation. The well is about $4\frac{1}{2}$ feet in diameter at the top and slightly less at the bottom, the slope being due to the necessity of avoiding cave-ins in this soil. Bricks have been placed around the wall of the well at the bottom to keep the water from being muddied when a bucket is dropped into it. At the edge of the well, a brick wall about 20 inches high has been constructed, over which a board has been placed to keep dust and other impurities from entering the well.

A post has been set on each side of the opening to support a *cambíto*, or horizontal bar with a crank. A rope attached to the bar winds or unwinds in keeping with the direction the bar is turned. On the end of the rope is a bucket which is lowered and raised through an opening about 20 inches square cut in the board covering the well. A small iron weight in the form of an old horse-shoe has been attached to one side of the bucket, so as to make it turn over upon striking the surface of the water, and fill. In the 33 years since it was dug, this well has never gone dry.³³

In 1916, a few enterprising villagers built a cement reservoir about 13 feet high and 10 feet square on an elevation some two hundred yards to the south of the village and diverted water from a brook about a half mile away to flow into it. From the reservoir, water was then piped into village dwellings so that today, of a total of 73 houses in the village, 41 are supplied with running water. A charge of from Cr. \$5.80 to Cr. \$8.80 (about 32 to 48 cents), depending on the size of the family, is made for this service. Other families in the village carry water from one of the two public faucets located at either end of the village *praça*, in tins formerly used for gasoline. Farm families occasionally use bamboo canes to bring water into the yard from nearby streams.

THE MATA

Although in recent years most of the remaining *mata*, or virgin forest with its tangled mass of underbrush and vines, has been cleared away, a few patches and an occasional larger area still stand uncut, especially along the river. These are a source of firewood, lumber, *taquara*, and *cipó*, as well as of game, wild fruits, and plants for medicinal or magical purposes.

Cipó is the local term, of Guaraní origin, for *vine*. It is, however, more commonly used to refer particularly to several similar species of vines found in abundance in the *mata* which are excellent for binding. When green, they bend readily without breaking and, after drying, remain for years strong and firm. Eight species used by local inhabitants are called *São João*, *mandinga*, *cruz*, *d'alho*, *macunã*, *branco*, *de sapo*, and *nervo-de-boi*.

³³ The cost of digging was 800 *reis* per *palmo* (span) for the first 10 *palmos* and 1 *milreis* per *palmo* thereafter.

The São João is universally preferred.³⁴ It is used in the construction of houses of *pau a pique*³⁵ and similar buildings, to make handles for baskets, to tie together bamboo or other poles for fences and on any one of a number of other occasions when a binder is needed. The other kinds are used to a lesser extent, usually in the construction of fences and buildings. The presence of the *mandinga* is considered to be an indication of fertile soil. Two other species of *cipó*, known locally as *goiaba* and *leite*, are said to be of little value.

The *taguara*, a plant related to the bamboo, is also much used. Local inhabitants distinguish 10 kinds: *uvú*, *póca*, *pinínga*, *ussú*, *mirim*, *da Índia*, *do reino*, *Guiné*, *Chinesa*, and *taguarí*. The *Chinesa* is used to build fences and to make bird cages; *da Índia* to build fences and to make fishing poles; *do reino* to make *pios*³⁶ and guiding sticks for rockets.³⁷ The *taguarí* is considered of little value. All the remaining kinds are used to make *jacás* and other baskets, *apás* for winnowing, *peneiras* for sifting and *embornais*, or feed bags for horses.³⁸ The bamboo proper (also called locally *manbú*), originally imported into Brazil, is used to build fences and to furnish support for occasional grapevines.

Among the trees most used for lumber are the *jacarandá* (*Jacaranda* spp.), *peroba* (*Aspidosperma* sp.), *guatambú* (*A. olivaceum*), *saguarangí* (*Colubrina rufa*), and *piúva* (*Tabebuia ochracea*), all of which are excellent hardwoods, as well as the softer *cedro* (Brazilian cedar: *Cedrela glaziovii*), *canela* (*Nectandra* sp.), and *passuaré* (*Sclerolobium denudatum*). The *cambará* (*Mouquinia polymorpha*) and *jacaré* (*Piptadenia communis*) are used for fence posts. The wooden portion of pack saddles is made from *guaica*. Poles from the *araçapiranga* (*Psidium* sp.) and *capichingui* (*Croton floribundus*), both of which are said to be especially weather-resistant, are used for building purposes. *Gamelas*, or wooden bowls, are carved from *caróba* (*Jacaranda* sp.). *Capichingui*, *jacaré*, and *guaçatonga* (*Casearia sylvestris*) are preferred for firewood. A few *paineiras*, or kapok trees, also grow in the area.

An occasional pine tree is a source of *pinhões*, or pine nuts.

When a plot is cleared for planting, the smaller trees are used for firewood or made into charcoal. (See sections on Forest Utilization and Making of Charcoal.) An occasional bee-tree is still to be found in the *mata*. Several wild fruits and edible plants may also be found in season (see section on Wild Fruits). The use of other plants for medicinal or magical purposes is common.

WILDLIFE

As the timber and underbrush which once covered the hills and valleys have been cut away, the wildlife in the area has correspondingly declined. There is still, however, an abundance of fish in the river; and in the remaining timber along its banks, as also in isolated patches standing elsewhere, small animals and birds are still hunted and trapped.

The following fish are to be found in the area: *acará* (*cará*), *bágre*, *cascudo*, *lambarí*, *mandi*, *piava*, *pirapitinga*, *taia* and *traíra*. Three kinds are regularly caught and used for food: the *acará*, *bágre*, and *traíra*. The *acará* (*Geophagus*) is a prolific fish of up to 8 inches in length; when small, its alternating dark-blue and silvery stripes passing vertically around the body give it an attractive appearance which, however, fades somewhat with age. The *bágre* belongs to the family Pimelodidae. It has a dark back and light-colored underside, a huge mouth and small teeth; it at times reaches 14 inches in length. The *traíra* (*Hoplias*) is dark gray with yellowish stripes. It reaches over 12 inches in length and weighs up to 4½ pounds. The mouth is large in proportion to the body and the teeth are strong and sharp.

The *lambarí* (*Tetragonopterus*) are also caught, but only during the months when the *siriri* and the *isá* (see p. 34), which are used at bait, are available. Approximately 150 species are known in Brazil (Von Ihering, 1940, p. 459). The most common in this community are in general silver-colored, with a dark streak down the back and a red tail. The larger species, averaging about 6 inches in length, are called locally *lambarí-guassú*; the smaller species, averaging around 4 inches in length, are called *lambarí-mirim*.³⁹ A number of

³⁴ During the months of June and July, huge clusters of slender, bell-shaped, orange-colored blossoms, each about 2 inches long, appear on this vine.

³⁵ See Dwellings and Furnishings, p. 42.

³⁶ Whistles which are used to call game birds.

³⁷ See Making of Fireworks, p. 83.

³⁸ See Basketry, p. 83.

³⁹ In Guarani, *guassú* (*assú*) means *large*; *mirim* means *small*.

smaller but related species (Cheirodontinae) which never exceed $2\frac{1}{2}$ inches in length and are light gray in color are known locally as *piquira*.

Also caught to a lesser extent are the *cascudo*, *mandi*, *piava*, *taiá*, and *pirapitinga*. The *cascudo* (Loricariidae), or literally "the thick-shelled," is named for its large, hard scales; it is a slender, dark-gray fish which reaches up to 12 inches in length. The *mandi* (*Pimelodus*) is a scaleless fish similar in appearance to the *bágre* except that it is more yellow in color and has bluish spots; it reaches around 12 inches in length. A local species, known as the *mandijuva* and more generally referred to as the *mandijuba* (*P. clarias*), reaches 18 inches in length. The *piava* (*Leporinus*) (Characidae) is silvery gray in color, with a dark back and tail and a small mouth; its maximum length is about 12 inches. The *taiá* (Characidae) is a silver-colored fish with a dark-gray back, a large mouth and quite visible teeth; it at times reaches 8 inches in length. Like the *lambari*, the *pirapitinga* (*Chalceus opalinus*) is caught only during those months when the *sirirri* and *içá* are available. It is an agile fish of silver color similar to the *lambari-guassú* and is ordinarily found among them. It reaches 12 inches in length and weighs up to 2 pounds. The mouth is small. The *corimbata* (*Prochilodus*) and *piracanjuba* (*Brycon*) are caught farther up the river.

A number of animals once common to the region are now extremely rare or have entirely disappeared: the *onça parda*, *onça pintada*, *jaguaritica*, *cotia*, *jacaré*, *ourigo*, *sagui*,⁴⁰ sloth, otter, fox, and anteater. Also occasionally to be seen are the *preá* (*piriá*), *cachorro-do-mato*, *mão pelado*, *bugio*, *saá*, *irára*, *gambá*,⁴¹ squirrel, rabbit, lizard, and four kinds of armadillo (the *canastra*, *galinha*, *vermelho*, and *do-rabo-mole* ⁴²).

Of considerable importance, however, still today, so far as hunting is concerned, are five game animals: the *capivara*, the *páca*, the *coatí* (*quatí*), the wild pig, and the deer. The *capivara* and the *páca* are similar rodents. The *capivara* (*Hydrochoerus hydrochaeris*) is light brown in color and

weighs up to 130 pounds. The *páca* (*Cuniculus paca*) is only about a fourth as large when full grown. The wild pig or *caiteté* (*Tayassu tajacu*), sometimes called locally the *tatêto*, looks much like the domestic variety except that the body is less corpulent and the legs are longer and more slender. The bristles are extremely tough. This animal roams in bands of at times as many as three hundred individuals. The *coatí* (*Nasua solitaria*) has a head similar in appearance to that of a fox. The body, however, is much larger and the legs are quite short. In general, it is yellowish gray in color, with white stripes on the face, alternating light and dark rings on the tail and black feet. It also ordinarily runs in bands, as many as 12 to 15 individuals being at times seen together. Local inhabitants refer to the *coatí-mundêo* as a distinct species; these animals, however, are merely aged males which wander about alone, apparently having been driven out of the band by the younger males. The local deer or *veado* (*Mazama americana*), when full grown, is only about the size of an average goat. It is then tawny in color, having lost the white stripes on its back which it had as a fawn. It is now the most numerous species of game.

One also finds in this area many different kinds of birds. Those which are most often hunted or trapped are the *chim-guassú*, *jacú*, *jurití*, *nhambú-guassú*, *nhambú-chororó*, *rolinha*, and *urú*.

The *chim-guassú*, or *alma-de-gato* (literally, "cat's soul"), is more generally known as *tinguassú* (*Piaya cayana macroura*). Its back is of chocolate color, the under parts being slate gray and the neck and chest grayish red. The tail is half again as long as the body. The *jacú* (*Penelope superciliosa*) is about the size of a small chicken, of brown color, with small red wattles. It is usually found in trees, although at times it is also to be seen on the ground. In flight, its wings produce a sound similar to a hoarse laugh. The *jurití* and the *rolinha* are variant members of the dove family. The *rolinha* (*Columbigallina talpacoti*) is smaller than the *jurití* (*Leptotila*) and has a slightly longer tail than is commonly to be found among dove species. It is sometimes called *fogo-apagô*,⁴³ a name derived from the sound it utters. Since, also, the sound of its wings in flight is similar to that made by the tail of a rattlesnake in motion,

⁴⁰ Respectively: *Puma concolor*, *Panthera onça*, *Leopardus pardalis brasiliensis*, *Dasyprocta azarae*, *Caiman latirostris*, *Coendou villosus*, and *Callithrix aurita*.

⁴¹ Respectively: *Cavia aperea*, *Cerdocyon thous*, *Procyon cancrivorus nigrripes*, *Alouatta caraya*, *Callicebus nigrifrons*, *Tayra barbara*, Didelphidae.

⁴² Respectively: *Priodontes giganteus*, *Dasypus novemcinctus*, *Euphractus sexcinctus*, and *Cabassous unicinctus*.

⁴³ "The fire has gone out."

the *rolinha* occasionally is called *rolinha cascavel* (rattlesnake *rolinha*). The *nhambú-guassú* is more generally known as the *inambú-guassú* (*Crypturellus obsoletus*). It is dark brown in color and similar in size to a small chicken. It is found on the ground in the *mata*. The *nhambú-chororó* (*C. parvirostris*) is a smaller species, about the size of a dove. It is found on the ground in the *tigüera*, or second-growth brush, whence the name by which it is sometimes called: *nhambú-de-tigüera*. The *urú* (*Odontophorus capueira*) is named for the sound it emits: "urú-urú-urú." It is predominantly brownish gray in color, with white dots on dark-gray wings. The male has a small, red topknot. Its legs and neck are both shorter than those of the *nhambú-guassú*. At night it roosts in trees. Also caught occasionally are the *pichororé* (*Saltator similis similis*), *sabiá-poca* (*Mimus saturninus frater*), *saracura* (*Aramides saracura*), and the small-bodied *frango d'agua* (*Porphyryla martinica*), although these birds do not play any significant role in the local food supply. The flesh of the *anú preto* (*Crotophaga ani*) is used as a folk remedy. Also occasionally to be seen are the *perdiz* (a local species of partridge) and the *codorna* (*Nothura maculosa*).

Many other birds are common to the community, including a number of song birds, some of which derive their names from the sounds they utter. Among these are the following, as known to the local inhabitants: the *anú branco*, *araçari*, *azulão*, *baitaca*, *bem-te-vi*, *bicudo*, *caga-sebo*, *chanchan*, *curiango*, *currú*, *garandí*, *jaó*, *João-de-barro*, *pintasilgo*, *sabiá-do-peito-amarelo*, *sanguede-boi*, *sanhassú*, *sem-fim*, *tangará*, *tico-tico*, and *tucano*, as well as the hawk (*carancho*), vulture (*urubú*), swallow, sparrow, parrot (including the *tuim*, a species of lovebird, and the parakeet) and several species of hummingbirds, or *beija-flores* (literally, *kisses the flowers*) as they are called in Brazil.

During the late summer (January to February), fireflies are numerous in the community and brighten the nights with their flashing lights. The members of the local family of these insects (Elateridae) average about an inch in length and are greenish-black in color. Two round spots on the head are also phosphorescent and look like tiny green headlights. They light up either in conjunc-

tion with or separately from, the light in the abdomen.

A perhaps minor but not insignificant part of the struggle for existence which the inhabitants carry on in this habitat is due to the action of noxious insects. Among the most competitive of these insects are the tick (*carrapato*), the ant (especially the *saúva*), the termite, spider (especially the *caranguejeira*), the mosquito, and the *berneira*.

Ticks are serious pests for both men and animals. The young begin to appear about the end of April or early in May and soon thereafter trees, shrubs and grass are covered with them. In this community, two species are known: the *picasso* and the *vermelhinho*. The *picasso* (*Amblyomma cayennense*) is the larger. Before feeding, the adult insect is flat and only about 4 to 5 mm. in diameter. As it fills up on the blood of its victim, however, it swells considerably until it may reach three times this size when, in shape and color, it resembles a small, unripe olive. It is to be found the year around. In the larval stage, it is quite small and occasionally piles up by the thousands on the branches of trees and of shrubs and blades of grass. Local inhabitants think of this larva as a separate species and call it *pólvora* (gun powder). The *vermelhinho* (*Rhipicephalus sanguineus*) or, literally, "the little red one," is a smaller species than the *picasso*.

The *pólvora* is the most obnoxious of all forms. As much as a pint or more of these larvae may be scraped off a cow or a horse at one time. They are most abundant and active in July and August. By simply walking a few yards along a path, a person may get the lower portion of his clothing literally covered with them. If not at once picked off, they soon are distributed over the body and are boring down beneath the skin to suck the blood.⁴⁴ Each puncture then begins to itch intensely. Unwary scratching may break off the insect's head and leave it to fester beneath the skin, thereby greatly increasing the irritation. If care is not taken, these minute wounds may become infected; in any event, the pain and discomfort they occasion seriously interfere with normal life, especially with work and sleep. Said a 70-year-

⁴⁴ Early in the period of field work, a student assistant counted 48 of these small ticks embedded in a portion of his body about 6 inches square.

old farmer, "Those cursed little beasts almost killed me last year. I was out cutting some timber for fence posts. Before I knew it, they were all over me in such numbers that I soon came down with a high fever. My legs were so covered with sores that it was nearly 3 months before I could walk well; and now (showing large discolored scars) look at these!" "It is terrible to have to bring in a horse," said a farm boy, "from a pasture full of ticks. You soon begin to itch something awful. You hardly sleep all that night because of those infernal little beasts. They don't kill, but they certainly do make life miserable for a person." The local remedy is *pinga* in which tobacco has been soaked, applied to the affected parts. For animals, garlic is put in the feed. The ticks also are combed out of the hair and tobacco and garlic rubbed over the animal's body. No farmer has equipment for dipping.

There are several kinds of spiders to be found in the community, all of which are nonpoisonous except the *caranguejeira* (*Grammostola*). It is a black, hairy spider and frequents dark places where there is little sunlight. Ordinarily it moves very slowly; at moments of attack or defense, however, it is quick and agile. There are two species. One is large and measures over 3 inches from the tip of the front feet to the tip of the hind feet. The other is smaller, approximately an inch long.

The *caranguejeira* is a serious pest. Care must be taken, for instance, when putting on shoes in the morning to make certain that this spider has not crept into them during the night or, as a villager said, "You will get bitten and you'll go hopping around on one foot for the next 24 hours hollering continuously with the pain." Cats occasionally die from being bitten by this spider, or from incautiously having eaten one.

The local inhabitants use two terms to refer to the various spiders they know: the *tecedeira*, or "web-weaver," which lives only in the timber or brush; and the *caseira*, or "house dweller," of which the *caranguejeira* is only one kind. The other "house dwellers" are called *oncinha* ("little onça") or *caçadeira* ("huntress"), *perna-fina* ("fine legged") or *de forro* ("of the ceiling") and *aranha de parede* ("wall spider"). The *oncinha* or *caçadeira*, is small, seldom reaching over half a centimeter in length, and light gray in color. It is to be seen around doors and windows on sunny days.

It stalks its prey until quite close when, with a sudden leap, it pounces upon it, whence the common name for this spider. The "wall spider" has a rather flat, dark-gray body from which its feet spread out in a circle up to an inch and a half in diameter. It hides in the interstices of doors, behind picture frames or other objects hanging on the wall. Its hunting is ordinarily done at night by artificial light. The *perna-fina* is a small light-gray spider, with a round body about a centimeter across and long, extremely slender legs four to five times the length of the body. It spins a net to catch the mosquitoes and small moths which are its principal food supply.

A serious crop pest is the ant. The most destructive species is the *saúva* (*Atta sexdens*). The adult is about three-fourths of an inch long and has sharp mandibles. In a single night, these ants can strip and carry away an unbelievable amount of green leaves from a garden or field, sometimes completely destroying a newly sprouted crop. Only those plants which exude a milky or aqueous substance, like papaya and banana trees, are immune to attack. So serious is the destruction caused by this insect that one commonly hears it said, "*Ou o Brasil acaba com a saúva ou a saúva acaba com o Brasil*" (Either Brazil gets rid of the *saúva* or it will get rid of Brazil). Although this is obviously an overstatement, the threat it emphasizes is none the less serious and real. Local inhabitants call the *saúva*, "the farmer's worst enemy."

Sometime in September or October, the young female *saúvas*, called locally *igás*, heavy with eggs, grow wings, come out of their nests and begin to fly. After being in the air for some 10 to 15 minutes, they settle again. A large proportion die; but other *igás*, having landed on cleared and (even more fortunately) cultivated land, are able to dig a cavity, known as the *panelinha*, into which they subsequently deposit their eggs. The new larvae when hatched will enlarge and extend this nest into a *formigueiro*, or ant hill, of loose dirt, the base of which sometimes reaches 15 feet in diameter.

The *lava-pés* ant (*Solenopsis saevissima*) is a serious threat to onions and peanuts. It attacks the seed in the ground. When attacking animals, it has a sharp and painful bite, as also does the *sará* (*Camponotus rufipes*).

The *cupim*, or termite, is less destructive than the ant. It may fill a field or a pasture, however, with numerous "ant hills," each of which will average around $2\frac{1}{2}$ feet in height, while some hills reach 5 to 6 feet (pl. 20, *h*). The presence of these hills obviously constitutes a serious problem for the farmer. Not only do they take up considerable space that otherwise might be used for planting, but they seriously impede the operation of animal-drawn implements. These insects also eat their way through wood, and the tunnels thus formed gradually weaken the framework of a house or other building until it eventually collapses. They are difficult to destroy, the most effective means being a strong insecticide in either liquid or powder form.

A case of malária occasionally appears in the immediate vicinity of the river, thus attesting to the presence of the *Anopheles* mosquito. These cases, however, are quite rare and none have been known to occur in the village itself, at least in recent years. A nonmalarial mosquito, however, known locally as the *pernilongo*,⁴⁵ is a quite obnoxious pest to be found in considerable numbers in the area. During the "time of the heat," especially the months from October to December, these mosquitoes are particularly active. They are a source of intense discomfort to both men and animals. "How they do attack chickens!" said a farm boy. "The other night the little fellows in my chicken house began to cheep something awful. I woke up, jumped out of bed and grabbed my gun, thinking a *gambá* had gotten into the chicken house. But I found the little fellows were just 'paying the duck.'⁴⁶ The *pernilongos* were sucking the blood right out of them." A local D. D. T. preparation and another insecticide are now coming to be known in the community, but because of their cost are little used. Other blood-sucking gnats referred to by the inhabitants are the *pólvora* (*Culicoides*) and the related genera, the *borrachudo* (*Simulium*), *cangalhinha*, and *birigú* (*Phlebotomus*), all of which are very annoying to a man working in the fields or timber.

Serious fly pests, especially so far as livestock is concerned, are the *berneira*, *varejeira*, *beronha*, and *botúca*. The *berneira* (*Dermatobia hominis*) lays eggs on certain flies and mosquitoes which stick to their bodies and eventually hatch into larvae, called *berne*. The latter then pass from their first hosts on to the skin of animals, including, occasionally, man. Digging under the skin, they feed upon the new host until they attain as much as an inch or more in length. Cattle sometimes carry several score of these obnoxious guests at one time. The animals obviously suffer considerably, and their hides eventually become worthless. A subcutaneous swelling $2\frac{1}{2}$ inches in height and 2 inches across was observed to have developed from the action of *berne* on top of the head of a 6-year old child on a farm in the community. The *varejeira* (*Callitroga macellaria*) lay their eggs directly in a break in the skin, as for instance the unhealed navel of a new-born calf, which then hatch into larvae called *vareja*. The action of the latter develops large open sores. The *beronha* is a blue fly which lays its eggs on the ears of animals, especially dogs, or in fresh meat. The *botúca*, elsewhere called the *motúca* (Tabanidae), sucks the blood of animals but does not deposit eggs on their bodies. More than 200 species are known in Brazil. Three are spoken of in the community: one that is black in color and reaches nearly an inch in length; a smaller species that is dark green in color; and a still smaller species that is yellowish brown in color. They are all exceedingly persistent in attacking their victims.

One of the ever-present pests which detract from the comfort of men and animals is the flea, its bite being serious, however, only when the part becomes infected. The scorpion is occasionally found in the community. The *curuquerê* (*Alabama argillacea*), a leaf worm, attacks cotton.

Snakes, including several poisonous species, abound in the community. The most common non-poisonous snakes are the boa constrictor, the *mussurana* (*Pseudoboa cloelia*), one species of coral known locally as the *boicará-de-duas-cores*⁴⁷ (*Erythrolamprus aesculapii*), the *cobra pimenta*

⁴⁵ Most, if not all, of the mosquitoes called locally by this term are not actually the *pernilongo* proper, which is of the Culicidae family among whose genera are the malaria-carrying *Anopheles* and the yellow-fever-carrying *Aedes*; they are rather of another family, the Tipulidae.

⁴⁶ A slang phrase meaning "suffering without reason."

⁴⁷ *Boi*, or more accurately *mboi*, is a Guaraní word meaning snake; *corá* is a corruption of coral; *de-duas-cores* means "of two colors" and is used to distinguish this snake from the poisonous *de-três-cores* (of three colors).

(literally, "pepper snake"), *caninana*⁴⁸ (*Spilotes pullatus pullatus*), and *cobra cipó* (*Chironius carinatus* or *Philodryas serra*), a tree snake, named for its close resemblance to *cipó*.

Poisonous snakes include the viper,⁴⁹ rattle-snake, one species of coral called locally the *boicará-de-três-cores* (*Micrurus corallinus*), *jararaca*, and *urutú*. The *jararaca* and the *urutú* are of the same genus. Of the *jararaca*, three species are known in the community: the common *jararaca* (*Bothrops jararaca*), *jararacussú* (*B. jararacussu*), and *jararaca-do-rabo-branco* (*B. neuwiedii*). The *urutú* (*B. alternatus*) is sometimes called locally the *urutú cruzeiro* and sometimes the *urutú dourado*. The former term seems originally to have been used in the States of São Paulo and Rio de Janeiro and the latter term in Rio Grande do Sul. The two expressions have met and now exist side by side in this community. The *quebra-quebra* or *cobra-de-vidro*,⁵⁰ although referred to locally as a snake, is instead a species of lizard (*Ophiodes striatus*). The *cobra cega*, or literally "blind snake," also thought locally to be a snake and a poisonous species at that, is in fact an amphibian (*Siphonops*). The *sucuri* to be found elsewhere in the State of São Paulo is unknown in this community.

Cases of men and animals being bitten are relatively frequent. During the period in which field work was being carried on in the community, for instance, a 19-year-old girl was bitten one evening while walking in a street of the village. Many women do not leave the house at night for fear of them. Local residents commonly say, "I am scared to death of those beasts." A flat-headed snake with a slender neck is avoided or killed at all cost. Neutralizing injections, prepared and distributed by the Government institution at Butantan, are available in the village and neighboring towns. Distance and the difficulties of terrain and transport, however, often make treatment in time difficult.

The habitat, then, furnishes fish, animals, and game birds available for the taking. Especially important are the fats these afford, since the local

supply ordinarily is quite deficient. On the other hand, the principal opposition to the inhabitants, in their struggle for existence in this habitat, is the action of a number of different kinds of noxious insects. Especially prejudicial are the *saúva* ant and the *berneira* fly, the former to the farmer's plants, the latter to his livestock. To reduce the effect of the *berneira* and other flies, an especially hardy breed of cattle from India, the zebu, was introduced into Brazil many years ago and is now being raised in the community. (See pl. 20, *g*.) To reduce the effects of the *saúva* and other ants, insecticides are employed when the farmer can afford them. Snakes, scorpions, and a poisonous species of spider must also be dealt with.

POPULATION

In the *distrito*⁵¹ of which the village is a part and which roughly defines the local community, there lived in 1940, according to the Federal census of that year, 2,723 persons. Since there are 190 sq. km. in the *distrito*, this represents a density of 37.1 inhabitants per square mile. Of the total population, 9.1 percent lived in the village,⁵² while 90.9 percent lived on farms.

SEX, AGE, AND RACIAL DISTRIBUTION

Of this population, 1,406, or 51.6 percent, were men and boys; 1,317, or 48.4 percent, were women and girls. Outside the village, the distribution by sex favored the masculine portion of the population, by 52.1 percent to 47.9 percent; in the village itself, the feminine portion was larger, being 53.2 percent to 46.8 percent for the men and boys. No other data for the *distrito* are available from the 1940 census.⁵³

In the course of this study, however, population data were collected for the village and for 15 *sítios*, which were visited to obtain various kinds of systematic data. In the 73 houses of the village there are living at present (1948) 331 persons, of whom 169, or 51.1 percent, are men and boys; while 162, or 48.9 percent, are women and

⁴⁸ A political division similar in part to a township.

⁴⁹ The categories "urban" and "suburban," given in the census, have here been combined since the distinction is unrealistic from an ecological point of view.

⁵⁰ Census data are published only by the larger political units, the *municípios*. For the information given here, the author is indebted to Carneiro Felipe, director of the Brazilian *Serviço de Recenseamento* and Professor Hilgard O'Reilley Sternberg of the *Universidade do Brasil*.

⁴⁸ Two groups are distinguished in the community: *caninana-ussú* and *caninana verde*.

⁴⁹ Referred to locally as both *vibora* and *bitbula*.

⁵⁰ Literally, "break-break" and "glass-snake," respectively; so-called, local inhabitants insist, "because upon being struck, it flies to pieces."

girls. On the 15 *sítios*, there are living 158 persons, of whom 81, or 51.3 percent, are men and boys and 77, or 48.7 percent, are women and girls.

In the 25 years from 1923 to 1947, 3,049 babies were born in the *distrito*, according to the records in the village registry office. Of these, 1,559, or 51.1 percent, were boys and 1,490, or 48.9 percent, were girls. The sex ratio at birth, therefore, during this period, was 104.6 boys to 100 girls. During the same period, there were 251 stillbirths,⁵⁴ of which 136, or 54.2 percent were males and 115, or 45.8 percent, were females. This represents a ratio of 118.3 males to 100 females. Had these babies been born alive, the sex ratio at birth would have been increased one full point, and be 105.6 to 100.

The rather "balanced" character of the population with reference to sex, in both the village and the surrounding area, is to a considerable extent

duplicated with reference to age. The 5 to 9 age group, however, in proportion to the preceding and succeeding age groups, is numerically deficient in the case of both sexes. The women in the 20 to 24 age group are somewhat less numerous, and in the 35 to 39 age group somewhat more numerous, than in a "normal" distribution. The men are somewhat less numerous in the 50 to 54 and 70 to 74 age groups and somewhat more numerous in the 45 to 49 and 60 to 64 age groups than in a "normal" distribution. A noticeable inequality, numerically, between the sexes appears in the 20 to 24, 45 to 49, and 60 to 64 age groups, where the men are more numerous; and in the 50 to 54 and 70 to 74 age groups where the women are more numerous. These regularities and irregularities are evident in table 6 and the accompanying population pyramid (fig. 2).

⁵⁴ Stillbirths were 7.6 percent of all deliveries (3,300).

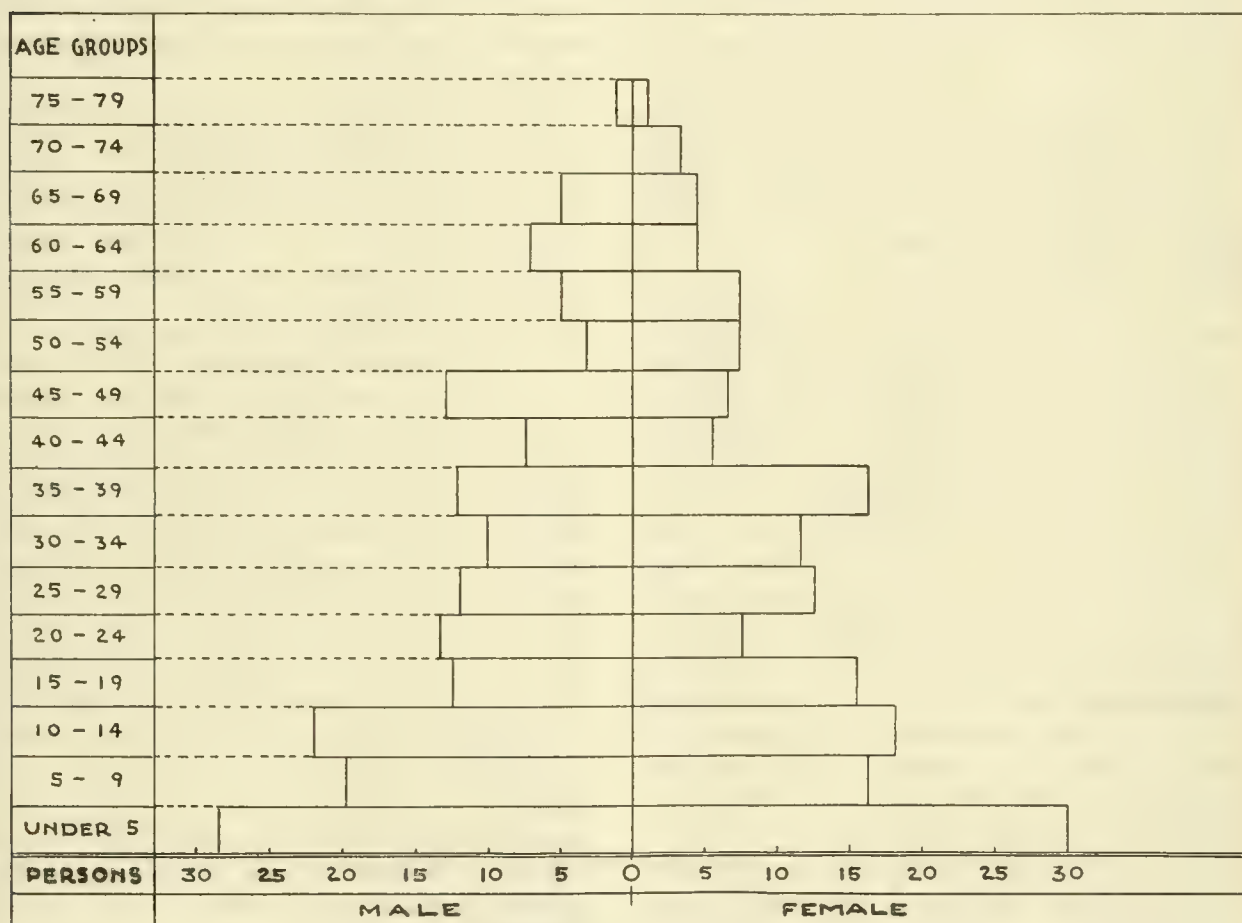


FIGURE 2.—Age and sex pyramid for the population of the village of Cruz das Almas, 1948.

TABLE 6.—*Age and sex distribution, village of Cruz das Almas, 1948*¹

Age group	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
0-4.....	28	16.6	30	18.5	58	17.5
5-9.....	19	11.2	16	9.9	35	10.6
10-14.....	22	13.0	18	11.1	40	12.1
15-19.....	12	7.1	15	9.3	27	8.1
20-24.....	13	7.7	7	4.3	20	6.0
25-29.....	12	7.1	12	7.4	24	7.2
30-34.....	10	5.9	11	6.8	21	6.3
35-39.....	12	7.1	16	9.9	28	8.8
40-44.....	7	4.1	5	3.1	12	3.6
45-49.....	13	7.7	6	3.7	19	5.7
50-54.....	3	1.8	7	4.3	10	3.0
55-59.....	5	3.0	7	4.3	12	3.6
60-64.....	7	4.1	4	2.5	11	3.3
65-69.....	5	3.0	4	2.5	9	2.7
70-74.....	0	.0	3	1.8	3	.9
75-79.....	1	.6	1	.6	2	.6
Total ...	169	100.0	162	100.0	331	100.0

¹ Source: Data gathered by research staff.

Statistical data on the present composition of the adult population by either race or color is not available. Of the 2,035 live births in the 17 years from 1931 to 1947, or that period in which color categories were employed in the village records, 1,490, or 73.2 percent, were listed as *brancos* (whites); 506, or 24.9 percent, as *pardos* (browns); 39, or 1.9 percent, as *amarelos* (Japanese). None were listed as *pretos* (blacks), a fact which reflects more the local racial situation⁵⁵ than the actual absence of relatively unmixed blacks among children born in the community.

Considering the character of this racial situation, the data in the *branco* and *pardo* categories are subject to considerable question from the standpoint of physical anthropology. Traces of Indian ancestry are apparent in a number of individuals whom local inhabitants invariably refer to as *brancos*. The same is true with reference to persons with visible traces of African ancestry. All that one can say with certainty, then, is that those persons classified as *brancos* are predominantly of European origin and that probably there are among them a number of individuals of unmixed European descent. The remainder are "whites" in the sociological, rather than the anthropological, sense. In this society, a person is white if he looks predominantly like a white and if his friends and associates so consider him.

In a country where sensitivity to racial variations is ordinarily low, one might expect a num-

ber of mixed bloods to be included in the *branco* category and a number of relatively unmixed Negroes to be included in the *pardo* category. This hypothesis is supported by the fact that among the children born during these 17 years not a single *preto* was registered, although several persons at present living in the community who were born during this period give indisputable evidence of being of relatively unmixed African descent.

Of the 148 stillbirths during these 17 years, 58.1 percent were registered as *brancos*, 37.8 percent as *pardos*, and 4.1 percent as *amarelos*. These data indicate that 94.5 percent of all *branco* deliveries were live births and only 5.5 percent were stillbirths; while 90.0 percent of *pardo* deliveries were live births and 10.0 percent were stillbirths; and 86.7 percent of *amarelo* deliveries were live births and 13.3 percent were stillbirths. In other words, the proportion of stillborn to live births among individuals listed as *pardos* is approximately twice that among those listed as *brancos* and the proportion among *amarelos* is even higher.

As has been indicated, in 1920, of a total population of 4,310 in the community, only 101, or 2.3 percent were foreign-born, all of whom were from European countries in which the language, religion, and many other cultural forms were similar to those of the people among whom they had settled. Of these immigrants, 27 were Spanish, 47 were Italians, and 27 were Portuguese.

In 1934, or the most recent year for which statistical data are available, there were, as has also been indicated, 64 Spanish, 56 Italians, 52 Portuguese, 73 Japanese, 6 Syrians, and 2 Germans in the community.⁵⁶ Of a total population of 3,780, then, 7.0 percent were foreign-born. In other words, in the 14 years between the two censuses, the proportion of immigrants in the population tripled. A part of this increase, however, was due to shrinkage in the total population. Although statistical data either to confirm or deny the hypothesis are lacking, it is probable that during the years since the last of these censuses was taken, the proportion of the foreign-born has not increased appreciably, if at all. There are at present no Germans or Syrians in the community and only two Japanese families.

⁵⁵ See section on Race Relations, p. 189.

⁵⁶ Thirteen individuals were listed as "unspecified."

FERTILITY AND LONGEVITY

There are 24 women in the village who are over 50 years of age and hence presumably past the time of child bearing. To these women, 176 children, or an average of more than 7 children each, have been born. One woman has given birth to 15 children and 2 women to 14 children each. Two women have had 12 children, and 2 others, 11. Three women have given birth to 10 children each and 3 to 9 children. One mother has had 8 children. Two women have had 5 children each and 2 others, 4 children. One woman has given birth to 2 children and 2 have had only 1 child. One woman is a spinster and 2 married women are also childless.

Unfortunately, no statistical data on fertility are available for the present community as a whole. In the village, however, there are 66 women between the ages of 15 and 44 inclusive, and 58 children under 5 years of age. For the village, therefore, the fertility ratio is 879 children to 1,000 women. If only the women who are between the ages of 20 and 44 inclusive are taken into consideration, the ratio is 1,137. Obviously, these samples are small and perhaps too limited for a valid statistical statement.

The Federal census of 1920 listed 632 children in the community under 5 years of age. Unfortunately, in the published returns, the 40 to 49 age group is not broken down into its 5-year components so that one may know precisely how many women there were from 15 years of age up to and including 44 years of age. There were 1,018 women between 15 and 49 inclusive; 703 between 20 and 49 inclusive. This would give a fertility ratio of 620.8 per 1,000 in the first case; 899.0 per 1,000 in the second case. It should be borne in mind, however, that this ratio is derived from a group 5 years older than that customary to use as a basis when computing fertility ratios. Data from the 1934 and 1940 censuses on age groups in this community have not been published so that fertility ratios can be computed for these more recent years.

The live births recorded for 1920 were 130. If, then, the total population as given in the census for that year was 4,310, the crude birth rate for 1920 would be 30.2 per 1,000 population. In 1934, when the State census gave 3,780 persons in the community, there were 148 live births; and in

1940, when a subsequent census gave 2,723 persons in the community, there were 93 live births. The crude birth rates for these 2 years, therefore, were, respectively, 39.2 and 34.2.

Obviously, the accuracy of these ratios is dependent upon the accuracy of the censuses and also upon how completely births are recorded. The 1940 census was taken by the *sub-delegado* (see Division of Labor, p. 59), a rather competent man and one who is intimately acquainted with the community. As either relative or *compadre*, he is closely related to a large number of families. The registration of births for 1940, however, may have been incomplete. As has been indicated, only 93 births were recorded in that year. For the previous year, births were given as 152, a sizeable variation. It is unfortunate that no data are available on the total population in more recent years, since the present registrar of vital statistics appears to be making a complete record of births. He is an able man who takes pride in the efficiency of his work.

During the 25 years from 1923 to 1947, there were recorded in the *distrito* 1,769 deaths, including 930 of males and 839 of females, the percentages being 52.6 and 47.4, respectively.⁵⁷ For 1940, the crude death rate was 20.9 per 1,000 inhabitants. If, then, the crude birth rate for the same year is 34.2, the favorable life balance for that year was 13.3.

These comparatively high rates of natural increase are reflected in the attitude of the inhabitants. A 52-year-old villager is proud of the fact that he has had 23 children, 12 by his first wife and 11 by the second.⁵⁸ The latter is again pregnant. Another villager tells of a man living near the neighboring town of Paratinga who has 22 children, all by the same mother. The wife of a village official says with pride that her mother had 15 children, 6 girls and 9 boys.⁵⁹ The legend is told in the village of a father of 25 children in a nearby community whose sons formed their own soccer team. "Although only 5 of my 15 children lived to be over 3 years of age," said a farm woman, "and the youngest is not yet married, I already have over 40 grandchildren."

⁵⁷ No accurate data on causes of death are available. Few mortal illnesses are attended by a physician and, even in these cases, circumstances do not always permit thorough diagnosis.

⁵⁸ Only 11 of the 23, however, are now living.

⁵⁹ All of the girls are still living but none of the boys.

Of the persons whose deaths occurred during the 25 years from 1923 to 1947, inclusive, according to the records kept by the village registrar, 150 had reached at least 70 years of age; slightly over half (79) of these were men. Fifty-six were over 80 years of age, 31 of whom were women. Twenty-one were over 90 years of age, 13 of whom were women. Six were over 100, all of whom were women; four of these were over 110 years each and two were listed as over 120 years. Of the 635 persons living to be at least 20 years of age, 23.6 percent were 70 years or more at the time of death; 41.4 percent were 60 years or more; 56.1 percent were 50 years or more.

It is possible that there is some error in at least the upper ranges of these statistics. In a few cases, no registry may have been made of the individual's birth. At least one elderly person now living in the village does not know her precise age. At the same time, it is clear that a considerable number of persons in this community have lived to what is referred to as "a ripe old age." If an individual survives the first 5 years of life, where the mortality rate, as will be apparent in the next section, is quite high, he has an even chance of reaching 50 years of age; he has nearly one chance in four of reaching 70 years of age; and he may live to be 100 years or older. A midwife says her father was 101 years old at his death, and her mother was 96. A village official tells of a former resident now living in a nearby town who has been married 80 years and is now 106 years old. His wife is also living.

These and similar cases have given rise to a legend of longevity in the area. A man from a neighboring town was heard to remark: "Ever so often, I hear that So-and-So has died at Such-and-Such a place and that someone else has died somewhere else, but I never hear of anyone dying in Cruz das Almas." Although obviously an overstatement, this remark emphasizes the hardihood of the local population.

INFANT MORTALITY

As has been suggested, the rate of infant mortality is comparatively high. Of 10 mothers interviewed at random, only one had not lost a child. She was a young woman 22 years of age, and had two children living. One other mother had lost six children and a third had lost five. The remain-

ing seven women had lost one child each. The 10 mothers had thus lost 18 children in all. The ages at death ranged from 9 days to 4 years, the majority being in the early months of life.

The 24 women referred to above, who are over 50 years of age and hence presumably past the child-bearing period, had given birth, as was indicated, to 176 children. Of these, only 84, or less than one-half, are now living. Whereas the number of children born averaged over seven for each mother, the average number now living is something over three.

In 1947, there were registered in the community 111 live births and 18 deaths under 1 year of age. The infant mortality rate for this year, therefore, was 162 per 1,000 live births. In the 25 years from 1923 to 1947, there were recorded 522 deaths under 1 year of age and 3,049 live births. This represents an average of 122 births and 20.9 infant deaths annually. For these 25 years, therefore, the average infant mortality rate was 172.1.

Of the 1,769 persons whose deaths were recorded during the same 25 years, 18.7 percent had died under 6 months of age; 26.6 percent under 1 year; 43.4 percent under 2 years; and over half, or 55.3 percent, under 5 years. Only about a third (35.4 percent) were over 21 years of age at the time of death.

There does not seem to be any appreciable difference in the infant mortality rate with reference to either sex or color. Slightly more male infants die under 6 months of age and this proportion maintains itself rather constantly during the first years of life, an apparently universal phenomenon which in this community, as elsewhere, is offset by the favorable balance of boy babies at birth. Of the deaths recorded in the community between 1923 and 1947 inclusive, the proportion of the deaths occurring in each sex group, which pertained to children under 5 years of age is shown in table 7.

TABLE 7.—Deaths under 5 years of age, by sex, Cruz das Almas community, 1923-47¹

Age	Males	Females	Total
	Percent	Percent	Percent
Under 6 months.....	20.2	17.1	18.7
Under 1 year.....	27.4	25.8	26.6
Under 2 years.....	44.0	42.7	43.4
Under 5 years.....	56.8	53.7	55.3

¹ Source: Records of village registrar of vital statistics.

During the 18 years from 1930 to 1947, inclusive, or that period in which color categories were employed in local records, none of the deaths under 5 years of age was recorded as that of a *preto*. This fact, however, is probably due to the character of the racial situation rather than to the absence of relatively unmixed Negro children among the deceased. For these 18 years, the proportion of the deaths occurring in each color group listed, which pertained to children under 5 years of age, is shown in table 8.

TABLE 8.—Deaths under 5 years of age, by color group, Cruz das Almas community, 1923-47¹

Age	Branços	Pardos	Total
	Percent	Percent	Percent
Under 6 months.....	21.1	17.5	19.0
Under 1 year.....	29.6	25.0	26.8
Under 2 years.....	45.9	42.0	42.8
Under 5 years.....	55.0	54.8	52.9

¹ Source: Records of village registrar of vital statistics.

Statistical data on causes of death are impossible to obtain with accuracy. As has been indicated, few deaths are attended by a competent medical practitioner and the causes given by parents or other relatives, many of whom are illiterate, obviously do not constitute reliable information. Observation would lead one to conclude, however, that among the principal causes of infant deaths in this community are respiratory diseases, especially bronchitis and pneumonia, digestive disturbances and dysentery, complicated by the action of intestinal worms and by deficiencies in the diet and in sanitation.

MOBILITY

The mobility of the population is relatively low. Travel is limited largely to visiting the neighboring towns of Boa Vista and Piracema on the occasion of religious and secular festivals, pilgrimages, and (in recent years) soccer games in which the local team participates. Farmers living on the margin of the community visit these towns and also Paratinga and São José dos Patos to make purchases, as do other farmers and a few villagers on more infrequent occasions. Of the families on 17 farms visited, three buy salt, coffee, kerosene, and similar necessities in one of the neighboring towns and three other families buy a part of these items there. The other part is purchased in the

village, as are all such items used by the other 11 families. Some of these 11 families, however, as do the other 6 families, buy all or a part of their farm tools, cooking utensils, and clothing in these neighboring towns. Three families, on infrequent occasions, make a few of such purchases even in São Paulo. Five families have relatives whom they occasionally visit, living in one or more of these neighboring towns, and three families have relatives in communities which are farther away, or even in São Paulo.

Several villagers, however, and other persons living on farms, especially the women and girls, seldom or never go outside the community. "I've never even been to Boa Vista," said a 16-year-old girl in the village. "When my sister married and moved away she wanted me to go along with her for a few days but I wouldn't go. *Deus me livre!*"⁶⁰ I don't want to be away from here. I would get too homesick for my mother." Several farm women, although they live only a comparatively short distance from the village, visit even it only occasionally.

As has been indicated, a few families migrated to the community some years ago from another community about 25 miles to the south and, sometime later, a few other families from still another community some forty miles to the east. A considerable number of the members of these families or their descendants now live in the village or on nearby farms. In more recent years, several families or unattached men also moved into the community, especially from the neighboring State of Minas Gerais and remained for some time while the men were employed in cutting timber and a few of these families and unattached individuals stayed on after the land had been cleared.

The number of persons involved in these migrations, however, was so small in proportion to the total population and the cultural characteristics of the incoming migrants were so closely related to those of the local inhabitants, that the effects upon the local society and culture have been minimal. The new population elements apparently were taken into the local society and absorbed with relative ease and a minimum of change and disorganization.

In 1934, according to the State census of that year, 98.01 percent of the persons in the com-

⁶⁰ "God deliver me (from that)!"

munity who were Brazilian-born were native to the State of São Paulo. In other words, of a total population of 3,780, only 70 persons had been born in other Brazilian states. Of these, approximately two-thirds had come from the neighboring States of Minas Gerais (38), Paraná (4), Rio de Janeiro (3), and Mato Grosso (1). Ten individuals had come from the Federal District, about 300 miles away. The other 14 persons were from 7 different states: Santa Catarina, Rio Grande do Sul, Bahia, Sergipe, Piauí, Ceará, and Pará.

Of 17 farms on which systematic data were collected, 6, or approximately one-third of the heads of families had been born on the farm where they are now living. The ages of these men were, respectively, 48, 46, 43, 38, 31, and 27 years. Of the remaining 11 heads of families, each had spent, respectively, on the farm now occupied the following number of years: 31, 26, 25, 20, 20, 18, 10, 6, 4, 2, and 1.

Of these 11 heads of families, 7 had been born in the community; consequently moving to the farm now occupied reflects merely migration within the community. Of the four other men, two had come from a nearby community about 30 years ago, and one somewhat more recently from the neighboring State of Minas Gerais. The other man was born in Italy but was brought by his parents to Brazil when only 3 years of age and came to this community a number of years ago.

Of the 331 persons in the village, 249, or approximately three-fourths, were born there. The other one-fourth has been in the village an average of 14 years for each person. Thirteen have resided there from 35 to 55 years, and 26 others from 4 to 30 years each.

The remaining 43 persons have been in the village only from 6 months to 2 years. With the exception of four unattached individuals, however, they belong to only eight families. The heads of four of these families have come to work on the *fazenda* that lies at the edge of the village, where a considerable acreage of timber is being cut. One family of eight persons is that of the *soldado*, a police official assigned to the village by the State authorities. The head of another family is a tin-smith.

Of the persons who have recently come to the village, all but 13 were born in the State of São Paulo. Most were born within a comparatively few miles of the village and only one comes from more than a hundred miles away. Nine persons are from other states, five from the neighboring State of Minas Gerais. One person is from each of the States of Rio Grande do Sul, Bahia, Ceará, and Rio Grande do Norte. Only four persons are foreign-born: one is from Spain, one from Switzerland, and two persons, a man and his wife, are from Japan.

There has been a considerable outward migration in recent years. According to the 1920 Federal census, as we have seen, the *distrito* at that time had a population of 4,310. The 1940 census, however, lists only 2,723 persons in the community. This is 1,587 less than in 1920 and represents a net decrease of 36.8 percent. If one also takes into consideration the comparatively high birth rate and the yearly margin of births over deaths, it is clear that a considerable migration occurred during the 20 years between the two censuses.

Presumably the major portion of this outward movement took place in the more recent of these years. According to the State census for 1934, there were at that time 3,780 persons living in the *distrito*. The net reduction in the population from 1920 to 1934 was therefore only 520, or 12 percent. The remaining 24.8 percent of the decrease from 1920 to 1940 thus must have occurred between 1934 and the latter date.

Twenty-five persons belonging to village families are living outside the village. Ten are women, who range in age from 15 to 37 years. Four of the women are living on farms in the same community. Three others have married men who are now living outside the community. Three young women are working as servants in neighboring towns.⁶¹ The 15 men range in age from 20 to 53 years. Five, or one-third, are living on farms in the community. The mothers of six others are widows who own no land.

Of 27 persons whom a villager remembers as having left the community during his lifetime, 23 went either to neighboring towns, principally Boa Vista and São José dos Patos, or neighboring farm communities. Three migrated to communi-

⁶¹ Shortly after this was written, two of these girls returned to the village after being away less than 6 months each.

ties not over 60 miles away and only one moved a further distance. Of these migrants, most had been born in the village or had lived there from 15 to 40 years each.

Indicative of the high degree of solidarity in the village is the fact that many persons, especially among the older inhabitants, show considerable reluctance to move away. The tax collector, a man 60 years of age who was born in the community and who has been collector for 29 years, received an order from his superiors some months ago to transfer to a town about a hundred miles to the south. He made every effort to have this order rescinded. "If some way had not been worked out so that I could stay here," he says, "I would have given up the job. Imagine me going to that *cafundó de Judas*!"⁶² They ought to know I couldn't leave this village like that." "I was raised here," said another villager, "and I like this place. I wouldn't live anywhere else."

Moreover, migration from the community is not necessarily definitive. Mobility tends to take on, in many cases, the character of what might be called extended fluidity. A man who came to the community 46 years ago subsequently moved to the neighboring town of Boa Vista where he remained a few years before returning to the village. "I like it here," he says, "I don't ever want to leave again." Another village official who also was born in the community, once worked for a year in a nearby town but returned to the village with immense satisfaction. A man 35 years of age, who especially likes to hunt, is thinking of accepting an offer to work in a nearby city. "I shall come back often to hunt," he says. "When people leave here," remarked a school teacher who has lived in the village for many years, "they like to go to Boa Vista, since it's close by and they can get back without much trouble. When they move, they seem to leave, thinking of the time when they can return."

Except in those cases, then, where ownership of land links the individual more firmly to the soil, there would seem to be considerable moving about from place to place in search of more favorable conditions in the struggle for existence. This movement, however, is ordinarily made over only a

limited distance. It indicates, perhaps, a certain restlessness in the population, especially of those persons who do not own land.

This movement may represent the persistence of one of those few vestiges of Indian culture, a restlessness handed on from seminomadic ancestors. It perhaps is also of considerable significance in explaining the cultural homogeneity of the region. It apparently has been going on in the community, as elsewhere in the region, for a long period of time. Of 77 free men, for example, who were married in the community between the years 1818 and 1828, about two-fifths (33) were listed in the parish records as coming from outside the community. The distance they had traveled, however, was not great. Eleven, or one-third, were from neighboring communities only a few miles away. Their meeting and marrying local young women therefore may have in some, if not all, cases, merely reflected contact between neighboring communities. Twelve were from other places within 25 miles of the village. Nine were from still other communities within 40 miles of the village. Only one man had come a further distance; he was from a northern state, about 1,300 miles away.

As is true today, the women at that time were much less mobile. Of the 77 marriage partners, only 10 were not born in the immediate vicinity of the village and 8 of these were from neighboring communities. The other two came from places not over 25 miles away.

One of the effects of mobility, coupled with the fragmentation of properties described below (see section on Wealth and Property, p. 95), appears to have been to remove completely from the community the class of *fazendeiros*, or large landowners, who supervised their agricultural holdings but did not themselves work the land. At least a few must once have lived in the community, although no present resident recalls one having moved away. There are, however, none today.

HYGIENE AND BODY HABITS

Children who have attended the village school know at least the main principles of hygiene. "You should wash your face, comb your hair, and brush your teeth every day," wrote a school boy. "When you cough, you should put a handkerchief over your mouth so the microbes won't come out

⁶² "The end of the world." *Cafundó*, apparently of African origin, means "solitary place." The addition of *de Judas* (of Judas) gives the expression superlative force.

and go to other people." "You should take a bath every day," wrote another school boy, "so as to clean out the pores. You should also put on clean clothes, especially to sleep in. Your finger nails should not be allowed to go dirty. The house should be swept often. Sheets, pillow cases, and blankets should be kept clean so that lice, bed-bugs, fleas, and such things won't get in them. The fruit and vegetables you eat should be well washed."

Acceptance of these principles, however, is often reflected more in word than in deed, and the word sometimes reveals this fact. "All of us should have hygiene," wrote one of the same boys, "because hygiene is a beautiful thing." "Many people think hygiene is a luxury," wrote the other boy, "but it's a thing everyone should love. God loves hygiene very much."

The level of cleanliness varies somewhat throughout the community. At least two of the farm houses visited were well-swept, dusted, clean and neat. The tablecloths on the kitchen and dining-room tables were immaculate. Another farm woman showed her freshly laundered household linen with pride and said, "I like to keep everything clean and ready to use when I need it." Towels, sheets, and pillowcases had been wrapped in a cloth to keep out the dust. At least a third of the 38 houses in the village which were visited during the course of this study ordinarily are kept as clean as is possible, perhaps, under the conditions of their construction. The members of several families, including a few of the less privileged economically, were observed always to be dressed cleanly and neatly.

Clearing the throat and spitting on the floor, however, on the part of both adults and children, is a generalized habit. At one of the larger houses on the farms visited, dogs, cats, goats, and chickens walked in the open door and roamed about at will. The mother and other members of the family paid little or no attention to these intrusions, even when the animals defecated on the earthen floor. When the 11-month-old baby wished to urinate, his aunt, who was leaning up against the kitchen door holding him, merely turned his body slightly away. Later, a 3-year-old boy went over in a corner to urinate by the kitchen stove.

The floor of the kitchen in the house of a villager was covered with peanut shells and other

refuse. A goat was sleeping in the center of the room. None of the clothing of the grandmother, mother, or children had been washed for a long time. When the 8-month-old baby dropped on the earthen floor a piece of bread which his mother had given him to eat, one of the other children picked it up out of the dirt and handed it to the mother who dusted it off slightly and gave it back to the baby.

One of the more obvious facts noticed about farm dwellings is the care given to keeping the *terreiro* clean. The *terreiro* is a space around the house completely cleared of vegetation. It is usually somewhat more extensive to the front and back of the house than along the sides. It is swept daily to remove all free dust from the hard-packed earth. Not uncommonly, it is kept cleaner than the floors inside the house. A farm mother who was observed carefully sweeping the *terreiro* remarked, "I always like to keep it very clean."

The discrepancy often seen between the cleanly swept *terreiro* outside and the less cleanly kept earthen floors inside is difficult to understand from a hygienic point of view. It is perhaps possible that the *terreiro* is one of the few traits of Indian origin still extant in the local culture. A farmer who was asked why flowers or other plants were not put around his house, replied, as if the statement were self-explanatory, "But that's the place for the *terreiro*." Another farmer, however, who was asked the same question, gave the rather plausible reply, "We keep it clean so that the *bichos*⁶³ won't get in the house. If there was anything close up to the building, they would come right in." In fact, the *terreiro* would seem to be a rather necessary precaution, considering the presence in the region, in considerable numbers, of scorpions, poisonous snakes and spiders, and other noxious pests, and that all land which is not periodically cleared is soon covered over with dense growth.

Although the range of behavior varies from family to family, bathing is relatively infrequent and usually only a part of the body is washed at a time. By the phrase "taking a bath," local inhabitants usually mean washing the feet or some other part that is especially dirty. To take a *banho de assento* is to wash the lower extremities from the waist down. The older children sometimes bathe

⁶³ Any animal, reptile, or insect is called a *bicho*.

the younger. "At night, after supper," remarked a mother in the village, "the children take a bath before going to bed. Ana and José put the baby⁶⁴ in the basin and wash him. The others wash their feet, or maybe their arms—whatever is needed to keep from getting the beds dirty." The river or creek furnishes a ready means of keeping clean, especially for the boys.

Brushing the teeth is comparatively rare. "When I asked the children the other day if they had brushed their teeth," remarked a school teacher, "one boy said, 'I brush mine every day with father's tooth brush. Father brushes first, then mother, then me and my sisters.'"

The wife and mother, both in the village and on the farm, washes the family's clothes, except when incapacitated by reason of childbirth or illness or when relieved of this duty by a daughter or other woman in the household. Nearly all farm women wash clothes in a nearby brook or creek (pl. 7), as also do several women in the village. Many village homes, however, as has been indicated, have water piped into them, and seven also have a cement tank for washing clothes. On one of the 17 farms visited, a cement tank is located at the side of the house, to which water is brought from a nearby stream by way of a small ditch. On another farm, water has similarly been diverted from a brook that passes near the house and let to run the last few yards through a bamboo cane and fall into a barrel, where it is handy for washing as well as other purposes. A third farm has a well 46 feet deep back of the house. The washing of clothes on all the other farms visited is done at nearby streams, the distance from the kitchen varying from 10 to 540 yards and averaging 140 yards.

Washing is done in cold water and usually with home-made soap, especially on the farms, or cheap laundry soap purchased at a village store. The clothes are first dipped in water and soaped well. Each piece is then doubled over and struck forcibly a number of times against a board or rock, and then spread out to bleach for a few hours in the bright tropical sunlight. Subsequently, the clothes are taken up, rinsed and put out to dry completely before they are taken into the house.

In a number of cases, houses are kept cleaner than the everyday clothes of the members of the

family. The work clothes often are worn quite soiled. It is common to see a mother clean the nose of her baby or other small child with the hem of its garment.

There is often evident, however, a genuine desire to appear to better advantage, especially to outsiders. Mothers continually apologize for the appearance of their children who, in many cases, have of necessity to play on earthen floors. As one mother said, "I gave my child a bath last night and put clean clothes on her this morning and now see how she looks! She crawls around in the dirt all day and I just can't keep her clean."

On the farm, with rare exceptions, bodily elimination is usually taken care of in a nearby piece of timber or brush. An occasional farm family has a privy back of the house, as do about a third of the families in the village. It is usually located about 12 to 15 yards from the kitchen door. A *fossa* is dug in the ground about 6 to 7 feet deep and 3 feet across. A board floor is laid over this excavation, and a small opening is cut in the center. A rude shelter some 5 to 6 feet in height is then erected, usually of brick and with a tile roof, although in at least one case, the sides and the roof are of galvanized iron. The building is called the *casinha* (little house), the term *privada* (privy) rarely being used. Due to the type of soil some of these excavations never fill; others are from time to time covered over with dirt and abandoned and a new *fossa* dug nearby. One villager uses lime in the *fossa*, a portion being put in once every 3 months. Toilet paper is not used, leaves from trees or bushes being used instead or, when available, old newspapers.

Since houses, both on the farms and in the village, are usually too small to afford more than one bedroom, in many cases the entire family sleeps in the same room. In a farmer's home visited, for instance, the father and mother sleep on a narrow double bed while a 7-year-old daughter and a 5-year-old son sleep on the same bed at their feet. A 13-year-old daughter sleeps on a small child's bed in the same room. In another home, nine persons—the father, mother, and their children, aged 1 to 18 years, and including a 13- and a 15-year-old daughter—sleep in one room and the adjoining space between it and the kitchen, where a *girau*⁶⁵ has been placed. In a third farm-

⁶⁴ Eleven months old.

⁶⁵ See *Dwellings and Furnishings*, p. 44.

house, a father, mother, and six children, aged 6 months to 12 years, all sleep in the same room. A village family of a father, mother, and four children (aged 10, 7, 4, and 1 year, respectively) sleep in the same room. The 10-year-old son of one of the village officials sleeps in a small bed in the same room with his parents. These arrangements are rather general in the community. With a few exceptions, children and parents in the village and on the farms ordinarily sleep in the clothes or undergarments which they have used during the day.

Piercing the ears of girls for the wearing of earrings is a universal custom. Usually it is done while the child is quite small. Sometimes the child is taken to a pharmacist in Boa Vista. Most commonly, however, the piercing is done in the home, either by the mother or an older sister or a neighbor woman who has had considerable experience. Thread is covered with wax and passed through the lobe with a needle and left for several days. Each morning, it is pulled back and forth a few times.

Considerable social pressure is put upon families to have the ears of the girls pierced. "My husband," remarked a farm woman, "always says, 'Why hurt the girls that way? Wait until they grow up. If they want to have their ears pierced then, it's all right.' But everyone else keeps telling me, 'Your girls look like boys. Aren't you going to have their ears pierced pretty soon?'"

In quite recent years, a girl or a younger woman in the village or on the farm will occasionally arrange a "permanent wave" in Boa Vista. Hair dyeing is rare. The use of rouge and lipstick are also rare, although the use of the latter is increasing, especially among the younger women. "If you wear it during the week," said a girl in the village, "people will talk. I put it on only when there is a *festa* or when I go to Boa Vista." In recent years, an occasional young woman in the village or on the farms has also begun to paint her finger nails.

TECHNIQUES OF SUBSISTENCE

To enable them to survive in the struggle for existence, and to satisfy other needs, certain techniques either have been developed by the inhabitants themselves or have been applied from the cultures which they originally brought with them.

The simplest technique has been merely to collect the natural resources supplied by the habitat. Of more complex character, however, have been other means of helping to supply the basic needs of food, clothing, shelter, fuel, and protection: the development of agricultural activities, the raising of domestic animals, the use of ordinarily simple tools, means of transport and distribution, and the application of certain rudimentary manufacturing processes. In supplying these wants, use has also been made of a simple division of labor, a medium of exchange, and a system of property holding.

EXTRACTIVE ACTIVITIES

Especially since the settlement in the area of Europeans and their descendants, the economy has been predominantly agricultural. At the same time, the inhabitants have long taken advantage of certain natural resources furnished freely by the habitat. Even today, there still exists food resources available for the taking, as well as plant and mineral resources.

FOOD COLLECTING

Fish, animals, and game birds, as has been indicated, are available in the habitat, as well as certain wild fruits and such local food delicacies as the *igá*.

HUNTING, FISHING, AND TRAPPING

No one in the community makes his living hunting, fishing, or trapping. Nor does anyone spend any appreciable part of a week or month so employed. At the same time, considerable hunting, fishing, and trapping are done in the community. Although these activities probably possess some of the characteristics of sport, they still maintain to a considerable degree their original function of furnishing food for the local inhabitants.

As indicated in the section on Wildlife, p. 17, several animals and game birds are still to be found in the local timber or brush. Among the animals, the *paca*, *capivara*, *coatí*, wild pig, and deer especially are hunted, their meat being highly prized as a welcome addition to the local diet. Of the fat of the *capivara*, local inhabitants say, "it purifies the blood and strengthens the body."⁶⁶

⁶⁶ It can be purchased in the pharmacies of the cities under its trade name.

Among the game birds, the meat of the *nhambú-quassú*, *nhambú-chororó*, *urú*, and the various members of the dove family, in particular the *jurití* and the *rolinha*, is considered "of delicate flavor and quite delicious." The meat of the *jacú* is dark and somewhat tough and usually is prepared by stewing instead of frying. Also occasionally taken for food, as has been indicated, are the *frango d'agua*, *pichororé*, *sabiá-poca*, *saracura*, *codorna*, and partridge.

The rifle and shotgun are employed in hunting. In most instances, the latter is a muzzle-loading gun, of either one or two barrels, called the *pica-pau*. A small amount of powder is poured into the barrel, a bit of paper or cloth wadding is inserted and tamped down firmly with a wooden or metal ramrod. A quantity of shot is then poured in, a second wadding rammed home, and a cap to ignite the powder is set where the trigger strikes. Occasionally to be seen also is the *reiúna*, a muzzle-loading gun used in the Paraguayan War (1865-1870). Boys occasionally bring down birds with sling shots made by fastening two bands of rubber to a forked stick. A few men make *pios*, or bird whistles, of native woods, with which they imitate the cry of different game birds as an aid in hunting. The *arapuca*, used for trapping game birds and small animals, is described elsewhere.⁶⁷

Hunting is a favorite activity of many men and boys in the village and on the farms. "I hunt a great deal," said a farmer. "I like to be in the woods. With a good *facão*,⁶⁸ I can go any place." Since the supply of game animals and birds is diminishing, hunting is allowed by law only 5 months of the year, from April through August.

A not inconsiderable part of the conversation of the men of the community, when they get together, is given over to recounting tales of hunting exploits, similar to the following:

We went hunting one day along the river. There were five of us—Zé, Little Boots, Quim, Juca, and me. We rode out to the *ranchinho*,⁶⁹ unsaddled our horses and left them there. Then we walked on a ways. When we got to a place called Jaguarí, we turned the dogs loose. They took off up the hill baying and yelping. Quim's spotted dog, Danuvio, soon ran into a *paca* but lost it in the brush. My black dog, Barão, came charging up the hill and ran right into the *paca*. Then everybody began to shout and yell. "Sick 'em, Bisúga," Zé shouted to his dog. "Go getum!"

The *paca*, with the dogs right on top of him, came charging down toward Juca. He kicked at it viciously as it went past him and plunged down into the river. Juca ran to the bank and saw it swimming out a little ways with its head above the water. He shot at it. Quim then shouted, "What kind of lead did you use, light or heavy?"

"Light."

"She's in the salt, then."

As he yelled this, Quim put out in a small boat and, coming up to the *paca*, grabbed her with his fishgig. She was badly wounded. We then went on up the river. Juca's dog, Cacique, soon ran into a *capivara* which was swimming among the *guapé* plants. I shot it, and we took it along.

On the way back, we stopped for lunch. Suddenly, Quim spied a small deer swimming down the river toward an opening on the bank. Malhado, that spotted dog of mine, also saw it and tore out after it just as it left the bank and soon caught up with it. Quim shot it and we took it along.

We got one more *capivara*. It was Little Boots who shot that one. He was on the other side of the river. He shouted that he had shot the animal through the head but when we came up and looked at it, the wound was in the rump. We kidded him something awful.

So we came home with two *capivaras*, a *paca* and a deer. Not a bad hunt! We also caught a lot of fish later that day.

As also indicated in the section on Wildlife, p. 17, several kinds of fish are caught in the vicinity. The nearby river furnishes a ready supply and fish also are to be found in more limited numbers in the creeks in the area. Occasionally, several men in the village will spend 1 or 2 days together at the river fishing, and men and boys also fish in smaller groups or alone. The means employed include the hook and line, the trotline, the fish trap (*covo*), and the *tarrafa*, the relative frequency in which they are used being in that order. The hook and line are employed for all fish except the *cascúdo*, and especially for *acará*, *bágre*, *traíra*, *lambarí* and *pirapitinga*. Hooks are of metal and factory-made. Lines ordinarily are also purchased. Occasionally, however, a line is still spun locally from *tucum* fiber which is especially strong and water-resistant. Fishing poles are of bamboo, or *taquara*, cut in the local timber. The trotline is a heavy cord, stretched across the river, with hooks suspended every few inches. It is used principally for *bágre*. The *fisga*, or local fishgig, instead of being employed in fishing, is used to spear *paca* when one of these animals has been wounded and is trying to escape by swimming in the river. It has a steel blade about 8 inches long with a sharp barb (fig. 3).

⁶⁷ See The Arapuca, p. 85.

⁶⁸ See Tools and Other Equipment, pp. 51, 53.

⁶⁹ A rude shelter built in the timber along the river.

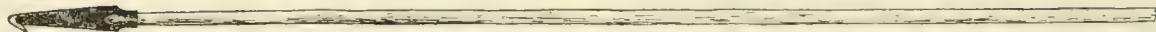


FIGURE 3.—*Fisga*, or local fishgig, used to pull a *paca* or similar animal out of the river when it is trying to escape by swimming.

The *covo*, or fish trap, is made of woven strips of *taquara* (pl. 9, *e*). It is conical in form, about $3\frac{1}{2}$ to 4 feet long and 14 inches in diameter at the base. Inside, beginning at the larger end, there is woven inward a second and smaller cone, the weaving of which is terminated a few inches from the apex so that the vertical strips of *taquara*, which are light and pliable, may easily be pushed apart by an entering fish. Once inside, however, the fish, on turning, is faced with the sharp ends of these strips which have closed together behind it, and is effectively trapped. A few inches from the apex of the outer cone, weaving has similarly been terminated, and the vertical strips of *taquara*, thus left dangling, are tied together with *cipó* or cord. By unfastening these strips, a man may readily remove his catch. Although other kinds of fish are occasionally caught in it, the *covo* is used most for *cascúdo*, *bágre*, and *mandí*.

The *tarrafa* is a circular net about 10 feet in diameter, made of stout cord or *tucum* fiber. The edges are doubled inward and every 6 to 8 inches lead sinkers are attached. A strong cord is fastened to the center of the net to pull it in after casting. The fisherman casts the net from the margin of the river, or from a boat, or while standing in the water at a likely place. After carefully folding the net, a feat which can only be done easily after long experience, the fisherman takes the central cord in one hand and, grasping the edge of the net in the other, awaits an opportune moment for his cast. When a fish is sighted or he otherwise thinks a cast likely to be productive, the fisherman bends his usually supple body in a graceful arc and with both hands flings the net outward in such a way that, as it drops on the water, it is completely spread out and remains at least partially open until it has settled to the bottom of the river. Pulling carefully on the cord, he aids the closing of the heavy lead sinkers around whatever fish happen to be underneath. The fish, feeling the net close over them, often entangle themselves the more with their efforts to escape. Pulling in the net carefully so that it does not leave the bottom of the river until all the leads

have closed together, the fisherman releases his catch, carefully folds up the net again, and prepares for another cast.

The bait used to catch fish with pole or trotline includes fish worms (*minhoca*), small fish, *sirirí*, and *igá*. As has been indicated, *sirirí* are termites at the flying stage in their development and *igá* are the females of the *saúva* ant, also at the flying stage and heavy with eggs. Fish worms are used the year around, especially to catch *acará*, *bágre*, and *mandí*. *Sirirí* and *igá* are used when available, usually in September and October, especially to catch *pirapitinga* and *lambarí*, including the *piquíra*. Small *acará* and *lambarí* are used to hook the *traíra*. A basket made of *taquara* and measuring about 12 by 24 inches on the sides and 12 inches deep, and suspended from a bamboo pole about 12 feet long, used to be used to catch fish in considerable quantities, especially the *lambarí-guassú*, as they leaped a falls in the river on their way upstream to spawn. Its use is now prohibited by law.

WILD FRUITS

As has been indicated, several kinds of wild fruit are available in patches of native timber and especially in the virgin *mata*. A number of these fruits are used by the inhabitants, including the *araçá*, *araticum*, *gabiróba*, *ingá*, *jabacari*, *jaboticaba*, *maracujá*, *pitanga*, and *uvaia*.

With the exception of the *gabiróba* (*Britoa sellowiana*), each of these several fruits is quite common. Most of them ripen sometime between November and March. The *jabacari* (*Psidium guajava*) grows on a bush which averages 5 to 6 feet in height. The leaves are dark green and glossy. The fruit is rather sweet and otherwise tastes somewhat like a plum. At first, it is yellowish green in color. As it ripens, however, in December and January, it becomes similar in appearance and size to the Concord grape, and when fully ripe, it is almost black. The seeds are relatively large and vary from two to four to a fruit. It is also variously referred to in the community as *guapacari*, *pacapari*, and *parapari*.

The *maracujá* is a local species of the passion flower (*Passiflora edulis*); the fruit is yellow when ripe. The juice of the *uvaia* (*Eugenia uvalha*) is used with *pinga*.⁷⁰ When ripe, the *gabiróba*, *araçá* (*Psidium* sp.), *uvaia*, *ingá*, and *araticum* (*Annona* sp.) are all yellowish in color. The *pitanga* (*Eugenia uniflora*) is reddish and the *jaboticaba* (*Myrciaria* sp.) is dark purple. There are two kinds of *ingá* (*Inga* spp.) distinguished locally, the *mirim* and the *ferradura*.

The root of the *caraguatá* (*Bromelia antiacantha*) is also sometimes made use of for food. *Pinhões*, or pine nuts, taken from an occasional pine tree, are much liked by the inhabitants.

İÇÁ

The *ičá*⁷¹ or female *saúva* ant at the flying stage when the abdomen is heavy with eggs, is caught and used for food. "Some people," a villager remarked, "would give their lives to eat *ičá*." "There are people," said another villager, "who like *ičá* so much they even make *passoca*⁷² of them." "There isn't anyone who wouldn't like *ičá*," remarked a farm woman, "if he once tasted them. Just to try them is to like them."

Opinion on this point, however, is divided in the community. "I've eaten *ičá* only once," said another farm woman, "and that was when a neighbor gave me some. My mother never fixed them for us when we were children." "I used to eat them when I was a girl," said a woman in the village, "but my husband doesn't like them and since I've been married, I haven't had any." "All our family except my brother-in-law," another woman remarked, "likes them a lot. He says, 'Who would eat ants, those nasty little things that destroy our crops!' But it seems to me that because of that very fact you ought to set your teeth into them with greater relish."

The technique of preparing *ičá*, as given by different farm women, is as follows:

"I put them into a skillet with a little fat and toast them. Then I make a strong *sarmona*⁷³ and pour it into the skillet and let it dry away."

"I put them into a skillet with salt and toast them a bit. Then I dump them into a *peneira*⁷⁴

and winnow them well until the wings and pincers are all blown out. Then I put them back into the skillet with some fat and toast them some more."

"I put them into the *forno*⁷⁵ and stir them up with salt. When they are well toasted, I take them out and pick out the legs and pincers. The tasty part is the abdomen (egg sack)."

FOREST UTILIZATION

Local timber resources have probably been utilized for firewood and building purposes ever since there were inhabitants in the region and for lumber and charcoal since probably the first years of European settlement. Only in comparatively recent times, however, has extensive advantage been taken of these resources.

A local resident who moved to the community 36 years ago, says that between the village and nearby towns "there was *só mata* (only forest)." Although this is probably an overstatement, since it is known that there has been considerable planting in the community since settlers first located there sometime in the latter part of the sixteenth century, or the beginning of the seventeenth, the remark emphasizes the considerable cutting of timber which has occurred in comparatively recent years.

The exportation of charcoal for use in São Paulo and other cities is said to have begun about 1928. The exportation of firewood for use as fuel in the wood-burning engines of the railroad and in the factories of São Paulo and other cities is said to have begun about 1932. During World War II, the cutting of timber for these purposes extensively increased. Most deliveries were made in São José dos Patos, the nearest point on the railroad.

Firewood that is exported for use on the railroad and in factories is cut into lengths of approximately 2½ feet for ready handling. The gathering of firewood for home consumption is referred to elsewhere (see Fuel and Light, p. 47), as also is the preparation of charcoal (see Making of Charcoal, p. 90) and of lumber (see Lumber, p. 91).

As has been indicated, a few *paineiras*, or kapok trees, grow in the area. The pods are picked in September or October; when dry, they are broken open and the floss is separated from the seeds and thoroughly dried. It is used principally to stuff

⁷⁰ See *Pinga*, Tobacco, and *Café*, p. 39.

⁷¹ Known in northern Brazil as *tanajura*.

⁷² See Food and Food Habits, p. 38.

⁷³ Local manner of saying *salmoura*: brine.

⁷⁴ A sieve made of *taquara*.

⁷⁵ A large shallow clay or metal vessel. See Pottery, p. 85.

pillows. The surplus is sold in São Paulo. The present price is reported to be 60 cruzeiros a kilogram or about US\$1.50 per pound.

The use of small poles for building purposes, of *cipó* for binding, of *cravórana* and *bucha da terra* in making rockets, of numerous plants for magical and medicinal purposes, of *taquara* for baskets, sieves, winnowing trays, fish traps, pipe stems, and *arapucas*, and of *tucum* fiber for weaving lines and nets, is referred to elsewhere.

PREPARATIONS FOR QUARRYING

A quarry is being opened up, at the initiative of outside capital, about 4 miles from the village. Soundings have indicated the existence of an extensive source of lime and cement, reportedly of excellent quality, much of it at or near the surface. Several men in the community are employed getting the quarry ready for operation and building a road through the hills to the rail line 11 miles away.

The expectation is that construction of a factory for crushing rock will shortly begin and that eventually several score of men will be employed. The development of this quarry and the probable migration to the area of a considerable number of workmen and their families will set in operation forces which increasingly will modify the ecological, economic, and sociological aspects of the community. The resulting changes might well be accompanied and reported upon.

FOOD AND FOOD HABITS

The staple foods of the community are beans, rice, and maize. Beans are universally used. There is no family which does not have them daily and usually at each principal meal of the day. Eight kinds of beans, known locally as the *mulatinho*, *preto*, *branco*, *roxinho*, *chumbinho*, *mourinho*, *leite*, and *carióca*,⁷⁶ are grown in the community. Although many persons like "any kind," the *branco* is most used. Each of the other kinds is preferred by a few individuals.

The use of rice is also quite common. "For me," said a farm woman, "if there's no rice, there's

no meal. My husband and the children also like it very much. I cook it every day." Beans and rice are the principal food of all families in the community and, for some families, almost the only food for days at a time. Maize flour and maize meal (*fubá*) are also common items of food.

The use for food of game animals, fish and birds, available in the area, as well as *içá*, has been referred to.⁷⁷ The contribution of this source of food to the total diet, however, is progressively less and less as the *mata* is cleared away. The severe epidemic of cholera which a few years ago destroyed most of the hogs in the region, reduced still further an already limited meat diet. Chickens and a few other fowls are raised but in relatively small numbers (see Domestic Animals). "It's too expensive to eat them," said a farm wife. "We have to sell them instead." Eggs are used "when the hens are laying." Goat meat is sometimes eaten, mutton almost never. Codfish is occasionally purchased at a village store.

Two head of cattle used to be killed in the village each week, one on Tuesday and the other on Friday. At present, a single beef is slaughtered each week, on Friday afternoon. An animal is purchased in the community by one of the two men in the village who do the slaughtering and driven in with the help of the butchers' dogs to a spot near the village where it is caught and tied to the stump of a tree. The subsequent event then ordinarily takes on something of a ceremonial character, in which a considerable number of villagers—men, women, and children—participate, in addition to the butchers and almost all the dogs in the village. As the animal is tied up, one notes on the faces of the persons who are standing around, and in the restlessness of the dogs as they pace back and forth, a rather general attitude of expectancy. One after the other, the persons present make known their wants. "Keep the heart for me," one of them will call out. "I want part of the liver," shouts another, almost at the same time. "Give me a good piece to stew," calls out a third. Meanwhile, one of the butchers has taken up a long, sharp-pointed knife and cautiously approached the animal. When near enough, and at an opportune moment, he plunges it into the left breast once, twice, or three times, until he reaches and punctures the heart. As the blood begins to spurt out,

⁷⁶ Respectively, little mulatto, black, white, little purple one, little lead one, little Moor, and milk. The *leite* is also called *catarinense* "because it came from Santa Catarina" (a Brazilian State), said a villager. *Carióca* is a popular term used to refer to the inhabitants of the city of Rio de Janeiro and surrounding portion of the Federal District.

⁷⁷ See Hunting, Fishing, and Trapping, p. 32, and *Içá*, p. 35.

the hungry dogs precipitate themselves upon the stream and each other and snarl and fight among themselves. A man standing nearby remarks, "Some things have to die so that others can live."

There is no refrigeration in the village. Rarely is a piece of beef left by the time the butchers close up that evening. When someone on a farm in the community butchers a hog or a goat, the meat is usually sold to neighbors and villagers and cooked the same day.

Chickens are usually killed by pulling the neck until broken. "It's so much easier than cutting the throat," said a farm woman, "and besides you save the blood." Goats and sheep, however, are slain by slitting the throat, as also are ducks, geese, and turkeys. Hogs, like cattle, are killed by sticking a knife into the heart.

Cows' milk is little used, even by those few families who sell milk to the cities. "The children just don't care for it," said a farm woman. "If the children liked milk," said a village mother, "we'd buy it; but they don't miss it at all." Goats' milk may be used if the family is fortunate enough to own a goat. Butter is rarely made on the farms or used in the community. Due to the epidemic referred to above, lard is scarce and families complain of its high cost.

The use of vegetables is limited. Sweetpotatoes and white potatoes are used when available, as also are lettuce, cabbage, tomatoes, and *xuxu*.⁷⁸ *Couve*, a plant related to cabbage, is rather generally liked. Maize, in season, is sometimes eaten on the cob. Onions are used only for seasoning. Some families use the root of the *caraguatá*, boiled and mixed with maize meal and beans and, for "greens," the sowthistle and chicory, all of which grow wild in the area. *Palmito*, or the central portion of the cabbage palm, is also sometimes to be found, and it is much liked.

The principal seasoning used for meat and vegetables is salt. Sometimes also used are black pepper, vinegar, onions, tomato extract, garlic, and marjoram; and, on special occasions, like those when a suckling pig is being prepared for a wedding dinner, wine and bay leaf.

Brazil imports from either the United States or Argentina most of the wheat consumed in the country. In recent years, due to war and post-war conditions, shortages of wheat flour have occurred

periodically. Wheat bread is much liked in the community and is used when possible to buy. It is not baked in either farm or village homes. Sometimes, if wheat flour is available for purchase in the village, a mother will make *bolinhos* by frying dough in fat, or bake a *bolo*, or loaf cake, on top of the stove, in a pan, upon the lid of which hot coals have been placed. If the hens are laying, eggs may be added to the *bolo*; more rarely, milk may be substituted for water. Maize bread is unknown, although occasionally a housewife makes a *bolo de fubá*, or a cake made with maize meal instead of wheat flour. Bicarbonate of soda or baking powder is used for leavening. Sweet manioc is occasionally used. It is either boiled in water in which sugar has been sprinkled, or boiled in salted water and fried in fat.

Doces, or any form of "sweets," are much liked and are prepared as often as can be afforded which, however, is only occasionally. Among the *doces* prepared at times in the community are rice pudding; squash, orange, and lemon preserves; *pé de moleque*, or peanut brittle; *fios de ovos*, *doce de pão*, *doce de leite*, and *cocada*.

To make *fios de ovos*, or literally "egg threads," the yolks of a dozen eggs are separated from the whites and beaten lightly with a fork. Meanwhile, sugar and water are boiled together into a thick sirup. A small hole is then made in the end of an egg shell and the latter is filled with the beaten yolk and passed rapidly around over the pan of sirup so that the yolk drains out in thin "threads" (*fios*). After these have cooked a few minutes, they are lifted out of the sirup onto a plate and wound into the form of a small bird's nest. A few pieces of cinnamon bark or whole cloves are sometimes dropped into the sirup.

To make *doce de pão*, dry bread is first cut into thick slices. The latter are then dipped, one by one, into milk and, after being laid briefly on a board for the purpose of pressing out the excess milk, are also dipped into beaten egg. They are then dropped into a pan of boiling sirup and left a few minutes until the egg is cooked.

Doce de leite is made by boiling milk and sugar together until thick and dropping the mixture, a spoonful at a time, onto a wet board where it is left to cool. *Cocada* is made by cooking freshly grated coconut in sugar and water until the sirup thickens, when the mixture similarly is dropped,

⁷⁸ *Secchium edule*.

spoonful by spoonful, onto a wet board and left to cool. In all cases, preparation is "by rule of thumb."

Bananas are the most common fruit used by the families of the community. Oranges are eaten in season. A few other fruits, including papaya, mangoes, pears, and pineapples, are used in relatively small quantities (see Gardens and Orchards, p. 68). The use of wild fruits has been referred to elsewhere (see Wild Fruits, p. 34). Home canning is unknown.

The local diet, therefore, is reasonably adequate in protein and carbohydrates. It is somewhat lacking, however, in fats and quite inadequate in minerals and vitamins.

Among the favorite foods referred to by individuals in the community are bean broth, bean *virado*,⁷⁹ suckling pig, chicken, rice, *paca*,⁸⁰ and beef. Roast suckling pig or roast chicken is considered a special delicacy. "There will be roast suckling pig (or roast chicken) today in So-and-so's house" is almost the same as saying, "In So-and-so's house, there will be a *feira* today." For those who can afford them, either one or the other is indispensable for a wedding dinner.

Passoca is a dish made of toasted maize flour and ground peanuts, which is much liked by the local inhabitants. The maize flour and the peanuts are first toasted separately. The skins are then stripped from the peanuts and they are put, together with the maize flour, into the *pilão*⁸¹ and crushed. When the two ingredients are well mixed, sugar is added and the mass taken out and sifted through a *penreira*. The *passoca* is then eaten with *café*, a spoonful of *passoca* alternating with a sip of *café*, or is taken with bananas.

At a wedding dinner given for his daughter by the man in the village who has the largest regular income, the following food was served:

Roast suckling pig (two whole pigs, one of which had been boned and stuffed with *farofa*⁸²)
*Torta*⁸³ of chicken and peas
 Rice, with giblet gravy
 Beans *tutu*⁸⁴
 Macaroni, with giblet gravy
 Lettuce, tomato, and *palmito* salad

⁷⁹ Left over boiled beans recooked with corn or manioc meal and lard and seasoned with onions. Sometimes pieces of hard-boiled eggs are mixed in.

⁸⁰ See Wildlife, p. 18.

⁸¹ A wooden mortar. See Dwellings and Furnishings, p. 45.

For dessert, there were cornstarch and gelatin puddings, and *bom-bocados*,⁸⁵ *Guaraná*⁸⁶ and *pinga* (see p. 39) were served to drink.

A man in the village who is famed for his skill in cooking occasionally furnished meals for members of the research staff engaged on this study. On two week ends, these meals consisted of the following foods:

Dinner (Thursday)	Lunch (Friday)
Beans	Beans
Rice	Rice
Maize meal	Maize meal
Smoked <i>bágre</i> stew	<i>Capivara</i> (smoked and roasted)
Stewed chicken	Smoked <i>bágre</i> stew
<i>Café</i> ⁸⁷	Tomato and onion salad
	<i>Café</i>
Dinner (Friday)	Lunch (Saturday)
Macaroni soup with giblets	Beans
Beans	Rice
Rice	Maize meal
Maize meal	Beef and potato stew
Lettuce salad	Lettuce salad
<i>Café</i>	<i>Café</i>
Dinner (Saturday)	Lunch (Sunday)
Macaroni soup with beef	Beans
Beans	Rice
Rice	Maize meal
Maize meal	<i>Bifes</i>
<i>Bifes</i> ⁸⁸	Fried eggs
<i>Café</i>	Tomato salad
	<i>Café</i>
Dinner (Friday)	Lunch (Saturday)
Beans	Beans
Rice	Rice
Manioc meal	Manioc meal
Stewed chicken with potatoes	Fried eggs
Lettuce salad	Salad of raw cabbage and hard-boiled eggs
Bread	<i>almôndegas</i> ⁸⁹
Wine	Bread
<i>Café</i>	<i>Café</i>

⁸² *Farofa* is toasted maize or manioc meal stirred into melted fat. In this case, the meal was of manioc; there had also been added olives, peas, and hard-boiled eggs chopped into small pieces, and the whole seasoned with salt, pepper, onions, garlic, and parsley.

⁸³ A pastry, similar to pie.

⁸⁴ Beans cooked with maize meal and seasoned with salt, onions, garlic, and cracklings.

⁸⁵ Literally, good mouthfuls: coconut cookies.

⁸⁶ A soft drink made from carbonated water and the seeds of the *guaraná* (*uarana*, *narana*), a native plant (*Paullinia cupana*).

⁸⁷ Black coffee made somewhat differently from that in the United States. See *Pinga*, *Tobacco*, and *Café*, p. 39.

⁸⁸ This term is applied in Brazil to several different cuts of beef fried like steak.

⁸⁹ Meat balls made of beef and bacon.

Dinner (Saturday)	Lunch (Sunday)
Canja ⁹⁰ with potatoes and cabbage	Beans
Lettuce salad	Rice
Bread	Maize meal
Café	Roast pork
	Roast ribs of goat
	Raw-cabbage salad
	Bread
	Café

Dinner (Sunday)
Beans
Rice
Maize meal
Roast leg of goat
Roast pork with green-onion sauce
Café

These meals represent what would be considered in the community tasty and substantial fare for special guests. The variety is much greater than would be common among either village or farm families. Beans and rice, as has been noted, are constant items in the local diet. During the period in question, bread was difficult to obtain, wheat flour being at times entirely absent from the market. Chicken was the principal meat available. Beef was to be had only on Friday evening, following the weekly butchering. Pork or goat was rarely obtainable. The vegetable salads were a concession to the food tastes of guests and are much less common in the community than these menus would indicate.

The time of meals is regulated more by the stomach than by the clock. *Café*, or the first meal of the day, is taken immediately upon arising. Some families take nothing but coffee at this time. Other families may also have bread, if available, or *bolo de fubá*; if they are farm families, they may also take something more substantial, such as bean *virado*, manioc, or sweet-potatoes. *Almoço* is the first substantial meal of the day. It is eaten sometime during the morning, often while at work in the fields. The hour varies from family to family and from day to day and often from person to person within the same family. This meal is usually taken, however, sometime between 9 and 11 o'clock, depending upon the time needed to prepare the food and to carry it to the field or upon the degree of hunger of the children and other members of the family.

If the man comes in from the field for *almoço*, he will probably appear, as a farm woman put it, "quando bate a fome" (when hunger strikes). The children are fed whenever the food is ready, or a child indicates he is especially hungry. All the children may or may not eat at the same time. Most families have afternoon *café* sometime between 12 and 2 o'clock. Again, they may have only coffee; or they may also take bread, *bolo de fubá*, or similar food and, occasionally, eggs with *farofa*. *Jantar*, or the evening meal, will be eaten when the man comes in from the field or the family's hunger dictates, which may be any time from 4:30 to 6:30 p. m. This is the second substantial meal of the day and ordinarily consists of more of the same food which the family had for *almoço*.

On 4 of 17 farms visited, the family usually sits at a table in the kitchen or dining room when taking meals; as similarly does a fifth family at times when the dining room is not being used to store onions or other produce. On another farm, the father and the older sons sit at a table in the dining room, but there is no table in the kitchen for the mother, girls, and younger children who always take their meals there. On the remaining 11 farms, the families are not accustomed to sit at a table for a meal. Instead, each person takes a plate of food and either stands, leans or sits in any convenient place about the kitchen or other room. On four of these farms, there is no table in the kitchen or any other part of the house. On another farm, there are two tables in the kitchen, but both are used to hold pots, pans, and other kitchen utensils instead of for eating purposes. When the family uses a table, in most cases, both on the farms and in the village, the mother and smaller children do not sit with the father and the older sons. Utensils used in eating are referred to elsewhere (see *Dwellings and Furnishings*, p. 46).

PINGA, TOBACCO, AND CAFÉ

Pinga is an alcoholic drink made by fermenting the juice of the sugarcane.⁹¹ The erudite term is *aguardente*, but this word is seldom, if ever, used in the community. *Pinga* is the principal beverage of the local inhabitants. Beer and a few other drinks, especially wine and cognac, are also used, but to a much lesser extent.

⁹⁰ Chicken soup with whole pieces of chicken and rice.

⁹¹ See *Distillation of Pinga*, p. 89.

The use of *pinga* is almost universal among the men. A villager well acquainted in the community knows only two men who do not use it. "*Pinga's* my drink," remarked a villager. "Not this sweet stuff. Only *pinga*. Drink until one keels over, until one wants to fight, not that! But taken as it should be taken, *pinga* is the best drink in the world."

Women also drink, but only occasionally and never in public. "You may be sure," said a villager who sells *pinga*, "that a woman who drinks in the sight of others is a prostitute." No woman is a habitual drunkard, although local residents tell of a wife who, worried over her husband's behavior with another woman, "drank herself to death" some years ago. Only an occasional man objects to his wife drinking moderately. Children are given *pinga* at an early age. "When they ask for it," a parent will say, "we give them a few drops."

Pinga is sold at the village stores, the bakery, and two *botequins*,⁹² either in bottles for taking home or in small "drinks" for consumption on the premises. The *botequins* handle nothing but liquor and soft drinks. Both are open daily. To the larger one, the term "bar," imported from the cities, is now being applied. In it, there are three small tables where customers may be seated while they play cards, and drink. There are six chairs. Regularly kept in stock are the following drinks:

<i>Pinga</i>	Anisette
<i>Pinga</i> , with mint	Bitters
White beer	Liqueur of cocoa
Black beer	<i>Agua tonica</i> (carbonated
Grape wine	water with quinine)
Pineapple wine	<i>Guaraná</i>
<i>Quinado</i> (wine with quinine)	<i>Refrescos</i> (apple, tangerine, pineapple) ⁹³
Vermouth	Lemon soda

Large quantities of *pinga* are consumed in the community. The owners of the three stores estimate that they sell each month, respectively, 200, 150, and 120 liters; the owners of the *botequins*, 150 and 60 liters; the owner of the bakery, 100 liters. This represents a total of approximately 180 gallons per month for a population of a little over 2700 persons. Although these estimates may be somewhat exaggerated, they are consid-

erably below another estimate, made by a village official and confirmed by other persons at that time present. It is at least certain that rather large quantities of *pinga* are regularly consumed in the community.

Consumption is heaviest on week ends, approximately as much *pinga* being sold on Saturday and Sunday as during the remainder of the week. It is also heavy on rainy days, when many farmers come to the village to pass the hours with their friends. "If you can't drink a drop or two in the village," one hears it said on a rainy day, "what are you going to do?" During "the time of the rains," consumption is always heavier than during "the time of the drought."

Drinking is almost entirely a social act. Only two men in the community are known to drink alone and this behavior is frowned upon. There is considerable "treating" of friends and acquaintances in an established, ceremonial manner.⁹⁴ To become drunk and noisy or quarrelsome, however, is severely condemned. To spend on drink for oneself or others money which is especially needed for other purposes is also censured, even by the owners of stores and *botequins*. There is only one habitual drunkard in the community. Three other men drink rather heavily. One of the latter, however, is commended by local inhabitants when he periodically "goes a year without drinking at all."

A favorite drink at *festas*, especially that of São João, is *quentão*. It is made by adding about half as much water to a quantity of *pinga* and boiling with a little ginger and cinnamon. It is served hot from the fire. A favorite drink at weddings is *pau a pique*, sometimes also called *temperada*. The principal ingredient also is *pinga*, flavored and colored with a bit of aniline, clove, cinnamon, anise, currant, or *capilé*⁹⁵ sirup, to which is also added a sirup made of sugar and water, hot from the fire.

The use of tobacco is almost universal among the men and quite common among the women. The preferred form is the cigarette, usually prepared as needed from shavings whittled with a pocket knife from a twist of tobacco. Corn husks are used for papers. Several men smoke pipes, as also do almost all the older women, especially on

⁹² Since this was written, another small *botequim* has been opened in the village.

⁹³ Soft drinks.

⁹⁴ See Etiquette, p. 122.

⁹⁵ (*Adiantum* sp.).

the farms. The men's pipes are usually of wood and are factory-made. The women's pipes ordinarily have a small clay bowl about three-quarters of an inch high, which is factory-made, and a thick stem of *taguara pininga*, cut from a nearby patch of timber (fig. 4). The term *pito* is universally applied to the latter pipe, and has also been generalized to refer to all pipes, instead of *cachimbo*, a term used elsewhere in Brazil. The chewing of tobacco is less common, being occasionally indulged in, principally, by a few older women. Only one person in the community takes snuff.



FIGURE 4.—*Pito*, or pipe for tobacco, used principally by the older women (natural size). Bowl is of clay, stem of *taguara*.

Many children learn to smoke cigarettes before they are adolescents and some at a still earlier age. On a farm which was visited, for instance, a 4-year-old girl and her 3-year-old brother and 2-year-old sister were all smoking *cigarros de palha* (corn-husk cigarettes). Each held the cigarette much as an adult would hold it and, from time to time, as he listened to the older persons talk, took the cigarette out of his mouth and spat to one side or the other on the earthen floor. "João's godfather," said a mother on another farm, of her 3-year-old son, "taught him to smoke. When he moved away, João kept begging, 'I want to smoke and I haven't got any cigarettes.' So I now give him one a day."

Coffee is a favorite and universal drink. It is prepared in Brazil by roasting the bean, with sugar, and grinding it to a fine powder. As needed, boiling water is poured over several tablespoonfuls and the liquid strained through a cloth and sweetened further with granulated sugar, *rapadura*⁹⁶ or, occasionally, *garapa*.⁹⁷ This *café*, ranging in color from light brown to black, is ordinarily taken without milk. Cream is never used. The amount consumed by each individual is impressive.

A person early becomes habituated to its use and throughout life drinks it in considerable quantities. It is taken early in the morning and at the two principal meals of the day and just before going to bed. In addition, smaller amounts may be taken at other times during the day, whenever a person becomes thirsty. *Café* always accompanies the husband's *almoço* sent to the field, usually in a *pinga* bottle which holds about a quart, with a corn-husk stopper. The average amount consumed daily is probably about 1 quart per person, including children. A farm mother,

for instance, prepares each day more than 4 quarts for her husband, herself, and two children, aged respectively 3 years and 17 months. A woman in the village prepares *café* three times a day, early in the morning, around 2 o'clock in the afternoon, and at night before going to bed. Each time she makes about 2 quarts for her husband, herself, and five children. These cases are typical.

Children begin to use *café* quite early in life. A young mother remarked, for instance, "My little girl (3 years old) takes *café* in the morning and at *almoço*, and by 2 o'clock she's asking for it again. Then she has it at supper and again just before going to bed. She doesn't care for it in a cup; she wants it in a bottle." With this remark, the mother filled a bottle with *café* and, adjusting a nipple, gave it to the child. Of a younger daughter, 15 months old, the mother then remarked, "Inês nurses. So she doesn't take as much *café* as her sister. Only a cupful in the morning and another in the afternoon."⁹⁸ A village mother of six children, aged 6 months to 11 years, remarked, "I always have *café* ready so that any hour the children want it, they can go there and help themselves." These cases also are typical.

⁹⁶ Crude brown sugar. See *Sugar Making*, p. 87.

⁹⁷ The juice of freshly crushed sugarcane.

⁹⁸ The cup is a large-size teacup.

Some families roast their own coffee, using beans which they either have grown themselves or bought in a local store. The roasting is done "by rule of thumb." "You have to have considerable experience," remarked a village woman, "to know just when the *forno* (a brick oven) is hot enough to put the beans in to roast. But I have done it for so long, it comes easy to me. When the beans are almost roasted, I sprinkle sugar over them and stir them until the sugar is well burnt. I can tell by the color of the smoke when it is time to take them out of the oven. I then put them in the *pilão*⁹⁹ and crush them into a fine powder. It's hard work! See the calluses on my hands? But we like the taste of home-roasted coffee much better than that bought at the store."

DWELLINGS AND FURNISHINGS

Reference has already been made to the oldest house in the community. It was erected in 1688, as can be seen from the date carved in the lintel of the front door. The inscription is in Latin and reads:

July 14, Maria, Jesus the Savior of Men, Joseph, 1688

Another inscription, carved in the lintel of a door inside the house, reads:

Remember, man, that thou art dust!

The house is of one story. Heavy, well-preserved beams of *peroba* support the tile roof. The walls are of *taipa*, or earth tamped down firm and solid. They are 18 to 20 inches thick and calcimined inside and out. The once earthen floors are now covered with brick. Slabs of rock were laid down a few years ago to use as steps to the front door, in place of the original earth which had worn down beneath the level of the entrance. The labor of slaves, probably of both Indian and African origin, went into the building of this house. It is still occupied and recently underwent routine repair.

The oldest house in the village was built "over a hundred years ago." Seven other houses are from a half century to a century old. All the houses in the village and on the farms are of one story, with the exception of one house in the village and a house on one of the farms. That in the village is of two stories, the lower of which is unused, except for an occasional dance.

The farmhouse is known throughout the community as the *casa grande* (great house). It measures 114 feet long by 42 feet wide and is approximately 33 feet from the ground to the ridge pole (pl. 6, *d*). The outer walls are of *taipa*, 2 feet thick and very firm. A little over a third of the building is constructed on two levels. The floors of the lower level are of earth and those of the upper level are of wide boards. A family of father, mother, and five children and a hired hand at present occupy the upper level, and the lower portion is given over to stables for milking cows and sheltering calves and other cattle. The rest of the building is open from the floor to the roof. Five heavy *peroba* beams, each 10 by 12 inches and weighing several hundred pounds, cross the space overhead, midway to the roof. Two large doors which used to be about 13 feet high and 5 feet wide have been reduced somewhat in size by bricking up a part of the opening. This portion of the house at present shelters equipment for making *pinga*.¹⁰⁰

Twenty-eight houses in the village, in groups of not over five each, are joined side to side so that they present a continuous front to the street (pl. 6, *e*), as is common to Brazilian villages and towns whose origin dates from the colonial period. Forty-five of the 73 houses, however, are separate and do not touch one another in any way. One house has a small veranda, about 4 by 6 feet.¹⁰¹

With respect to the materials used in construction, houses in both the village and on the farms are of two kinds: *pau a pique* and brick. In the village, 28 of the 73 houses are *pau a pique* and, on the farms visited, 19 out of 26 houses.

A *pau a pique* house is built of puddled earth spread over a framework of sticks. Four strong poles are set vertically in the ground to form the corners of the building and four other poles are laid horizontally to connect them. *Cipó*, or more frequently in recent years nails, are used to fasten the poles together. Longer uprights are then set in the ground at the center of each of two sides and a ridge pole is laid upon them. Parallel to the uprights, smaller poles are placed until the sides are entirely filled in, the poles not being set in the ground but merely supported by it. At

¹⁰⁰ See Distillation of Pinga, p. 89.

¹⁰¹ Of the 73 houses, 41 are owned by their present occupants and 32 are rented. Rentals range from 10 to 200 cruzeiros per month, with an average of 46 cruzeiros.

⁹⁹ See p. 45.

right angles to these smaller poles, long, narrow sticks are tied on at short intervals with *cipó*, both on the inside and outside (pl. 6, *f*). At the points where a door or window is to appear, poles and sticks are interrupted to leave the necessary open spaces. From the ridge, poles are then suspended as rafters and other smaller poles are laid over these at right angles and the whole covered over with either a thatch of *sapé* or tile. *Sapé* (*Imperata brasiliensis*) is a coarse grass extensively used in Brazil for this purpose. A shallow excavation is then dug in the ground near the structure, and earth and water are mixed in it to form a thick mud which is then slapped over the framework inside and out, and left to dry.

The walls of most houses of brick and a few of those of *pau a pique* are covered over with *reboque*, a plaster made of lime, earth, and water. Some are then calcimined on the outside in light yellow or white, especially at the front. If this is not done, the dried mud of a *pau a pique* house gradually wears or breaks off so that after a few years the house is in considerable disrepair.

As indicated, there are two kinds of roofs: those of tile and those of *sapé*. All of the roofs in the village are of tile. Of 25 farmhouses visited, 21 were of tile and 5 of *sapé*.

In the older houses, doors are of heavy wood, usually *peroba* or *cabreuva*.¹⁰² In the more recently built houses, however, due to the increasing difficulty of obtaining *peroba* and other hardwoods as the forest is cut away, *cedro*, *canela*, and even pine shipped in from other areas of Brazil, are used instead. Doors always open inward. They are fastened shut with a wooden bar, dropped into iron cleats set in the jamb. Most of the front doors are also equipped with a latch and a lock.

In all the houses on the farms visited and in all but a few of the houses in the village, windows are merely openings in the wall. At night or on rainy days, a shutter of unpainted boards which opens inward, is swung shut and fastened on the inside with either a wooden catch which pivots on a nail driven into the jamb, or a wooden bar passed through iron cleats set in the frame. No house observed on farms and only about a dozen houses in the village have glass in one or more windows. Approximately half the floors in the farmhouses

and about a fourth of those in the village are of earth and sometimes are quite uneven. The other houses have either wooden or brick floors, with the exception of an occasional floor made of cement. The kitchens in all but a few houses, and often the other rooms, especially in *pau a pique* houses, are without ceilings and open to the roof.

Most houses have been built by their present or former occupants, in some cases with the assistance of a local carpenter, especially with the windows and doors. A farmer and his three sons, for instance, assisted by a neighbor, are at present building a *pau a pique* house (pl. 6, *f, g*). "I put this house up 6 years ago," said another farmer. "I could not afford to have it built for me." "My husband is very handy with tools," explained his wife, "and he did all the work."

The walls inside many houses are bare, except for old calendars, or prints of up to 20 *santos*, or family photographs with perhaps as many as eight in a single frame, or an *oratório* in which the household *santos* are kept. In several homes, there also hang on the walls objects like oxhorns, saddles, animal skins, or the skull of a sheep.

In a few homes, especially in the village, one sees an occasional embroidered cloth or vase of flowers on a table, a crocheted doily on a cupboard, or a potted plant on a box in the corner of the room. These individual attempts at decoration, however, may not be supported by community standards. A farm woman, for instance, who apparently had considerable desire to improve the appearance of her home, remarked, "If I put a clean cloth and a vase of flowers on the table, someone who passes by will make fun of me and say, '*Casa de tapera, cheia de luxo*,' (an old dilapidated house, full of luxury). That way, you soon get discouraged."

The furniture is usually scanty and either home-made or of cheap factory manufacture. Occasionally one finds that members of the family have built such articles as rough-hewn benches; crude tables, made of boards or boxes and smoothed with sandpaper; cupboards, with shelves for kitchen utensils, and crude *oratórios*, both made from boxes; wooden supports for lamps or for bags used to strain coffee; and taborets, with broom handles for supports.

Most of the beds are of factory manufacture and include single, double and "three-quarter" beds.

¹⁰² *Myrcarpus fastigiatus*.

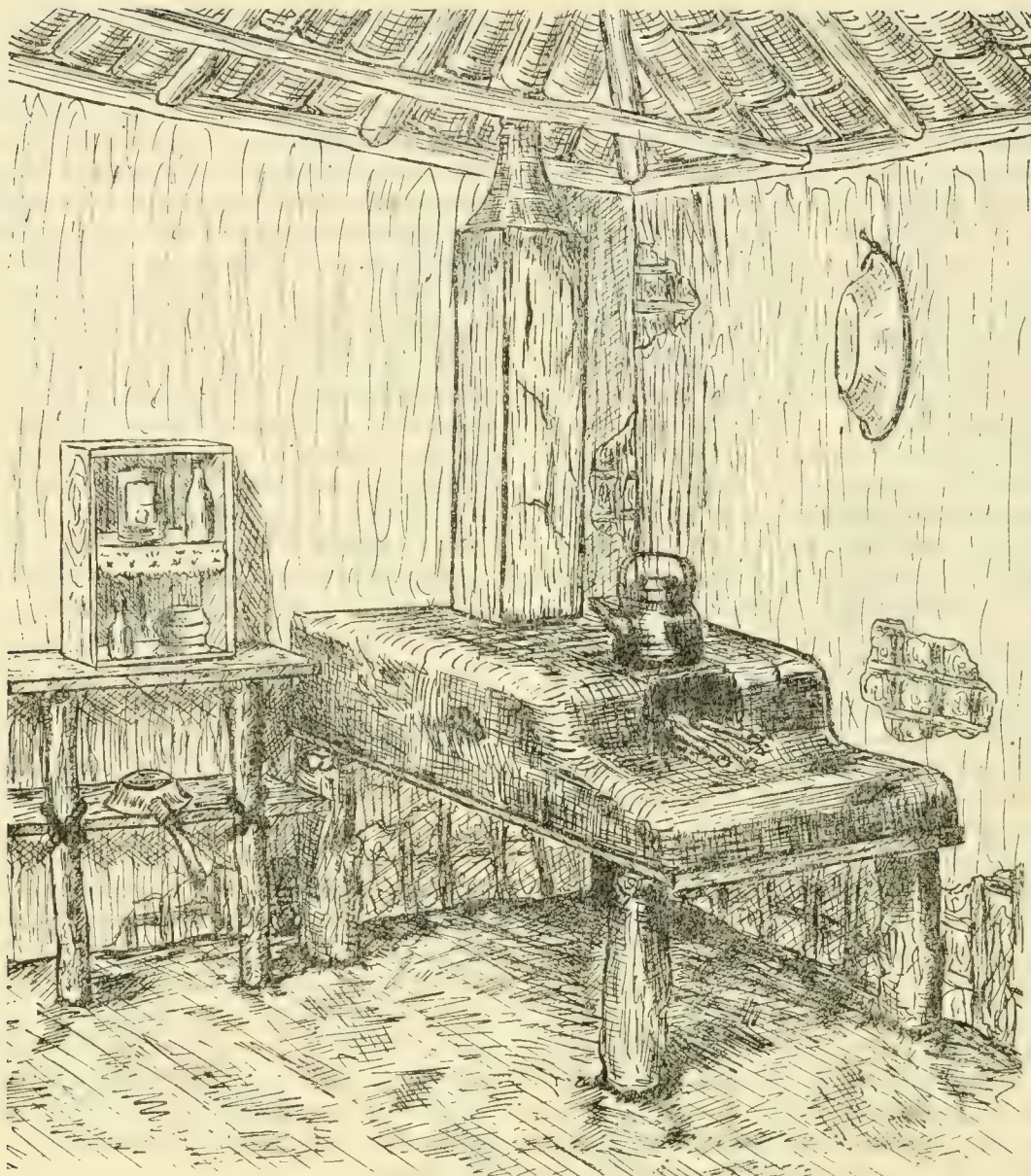


FIGURE 5.—*Poid*, or local stove used for cooking. The space underneath sometimes is filled in to the floor.

All of those observed were of wood. A crib for the baby occasionally may be seen, made of *taquara* (pl. 20, *d*), as well as an improvised bed, known as the *girau*. The latter is made by driving a pair of forked sticks into the ground about 4 feet apart and a second pair about 6 feet away. Two strong poles are then fitted to the stakes and other smaller poles or strips of rawhide laid crosswise. The same term is also applied to a similar construction occasionally to be seen at the rear or side of a

house, on which clothes are spread for bleaching and drying.¹⁰³

Most of the houses in the village and a few on the farms are equipped with factory-made chairs. These are all of plain, straight-back construction,

¹⁰³ In addition, the term is also applied to the wooden support on which a log is laid to be sawn by two men, one of whom stands on the ground and the other on a platform. The term used to be applied to a wooden platform placed in a tree on which a hunter, after tying a kid or other lure underneath, awaited an *onça*.

with the exception of a rare rocking chair, only one of the latter having been observed in the village. Perhaps half the houses have a factory-made table and a factory-made cupboard in which to keep food and dishes. Several families in the village and a few on the farms possess a wardrobe in which to keep their clothes; other families use for this purpose a box, trunk, or suit case.

The stove is invariably a *poiá*.¹⁰⁴ It is made by driving large stakes into the dirt floor of the kitchen and building over them a wooden platform about 5 feet long and 2½ feet wide (fig. 5).^{104a} If available, strips of tin may then be laid on top of this platform. A layer of brick is added and cemented into position with a mixture of earth, ashes, and water. Two rows of bricks, three to four bricks high, are laid along the far end and also along the sides from the back two-thirds of the way toward the front, to form the walls of a firebox about a foot wide and open at the front end. The near third of the platform is left uncovered to support sticks of wood which are periodically pushed further and further into the fire as the ends burn away. On top of the firebox is cemented into place an iron covering with two or three openings on which to set pots and other cooking utensils. Over the whole construction is then spread a layer of cement, made of the mixture referred to above or of clay from an "anthill" or, occasionally, of cow excrement, ashes, and water. Since a chimney is not always added, and often functions inefficiently even if added, the walls and roof of the kitchen are usually soon stained with soot.

Seven houses in the village and an occasional farmhouse have a cement tank, as has been indicated, for washing clothes. A few villagers and farmers have a brick oven at the back or side of the house (pl. 8). Thirteen families in the village and 8 of 17 families visited on farms have sewing machines of standard makes. The iron used for ironing clothes is heated by filling an interior cavity with burning charcoal (fig. 6). Light is ordinarily furnished by a kerosene lamp or lantern or a *lamparina*, made of a small bottle, or tin receptacle, into which kerosene and a wick have been put. Gasoline tins are used to carry water.

Wooden pegs, iron hooks, and nails are sometimes employed for hanging articles.

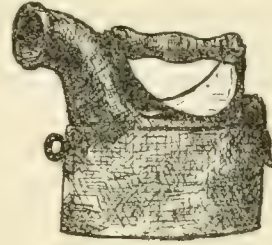


FIGURE 6.—Charcoal-burning iron.

At many houses, there is a *pilão*, or wooden mortar, used to crush foodstuffs (fig. 7). It has been made of a log of durable wood and usually stands

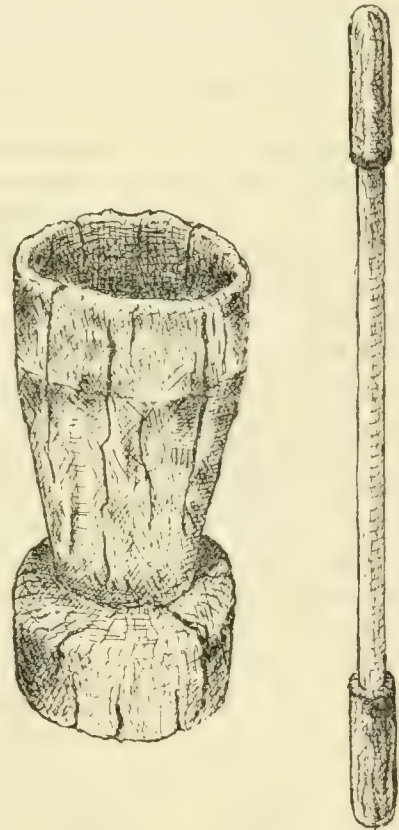


FIGURE 7.—*Pilão*, or wooden mortar, with pestle.

about 2½ feet high and has a cavity around 16 inches deep and 14 inches in diameter. The pestle is a heavy stick about 3½ feet long, operated by hand. The *pilão* is now used much less than formerly.

¹⁰⁴ This term sometimes is used, in other communities, to refer only to the platform upon which the wood is laid to be burnt.

^{104a} In some cases, the *poiá* is built directly upon the floor, without stakes under it.

The most common utensil used at meal time are the cup, soup spoon, and soup plate. In many farm and village homes, the soup spoon is the only utensil of its kind used and, sometimes, the only one owned. Several families have at least one or two table knives. Few families, however, have forks, except perhaps an old one employed in cooking. Any kind of food may be eaten from a soup plate. The cup used for drinking may be of enamel or, quite often, it may have been made from a tin can which originally contained some article purchased at a village store. Most families also have, for use in serving the *cafézinho*¹⁰⁵ to guests on the more formal occasions, two or three inexpensive china teacups, sometimes chipped and often without saucers, and a small, well-worn tray of cheap alloy. A few families possess, for use on these occasions, a more expensive set of teacups or demitasse cups and saucers and perhaps a brightly colored coffeepot, of all of which great care is taken.

An occasional family in the village or on a farm is more adequately supplied with table accessories than everyday use would indicate. In the village home which is probably most adequately furnished in this respect, there is a set of inexpensive silver-plated tableware, including knives, forks, table-spoons, and dessertspoons; and inexpensive china-ware, including dinner, dessert, and soup plates, a platter, a few serving dishes, a set of cups and saucers, and inexpensive glasses. A kitchen knife is used to cut meats at the table.

On 17 farms visited the tableware and kitchen utensils being used, in what is probably the most adequately equipped home, were as follows:

2 enamel plates	1 aluminum pan
8 china plates	3 enamel kettles
5 soup plates	1 aluminum teakettle
1 cake plate	1 aluminum coffeepot
5 knives, 6 forks	1 enamel coffeepot
8 tablespoons	2 bowls
4 coffeespoons	1 meat grinder
2 sets of china teacups and saucers	1 dishpan (made of tin cans cut and soldered together)
1 chrome tea and coffee set (coffeepot, teapot, milk pitcher, sugar bowl, tray)	1 potato ricer
1 cast-iron skillet	1 aluminum ladle
2 cast-iron pans	2 kitchen knives
	1 wire strainer
	2 cups, made of tin cans

1 sieve, made of <i>taquara</i>	1 cutting board
1 wooden frame to support a bag for straining coffee	1 <i>pilão</i>
1 basket, made of <i>taquara</i>	Several bottles
	A few tin cans of various sizes

The tableware and kitchen utensils in the home which is probably least adequately supplied were:

3 enamel plates	1 aluminum pan (much dented)
3 bowls	1 sieve, made of <i>taquara</i>
2 glasses	1 small basket
5 tin cups, made of cans	1 <i>pilão</i>
1 china teapot	Several bottles
1 china cup	A few tin cans of various sizes, some with lids
4 cast-iron pans	

In addition to the above-mentioned items, other farm families occasionally also possess:

Enamel cups	Wooden kegs (for water)
Wooden bowls	Tin basins
Clay waterpots	Enamel basins

With the exception of baskets, the *pilão*, and sieves, few utensils are home-made. On one farm, for instance, the only items which had been made by members of the family were two cups, prepared by nailing tin handles on tin cans. On another farm, the only item of this sort was a simple grater, made by opening out the tin from a tin can, perforating it with a nail, and attaching it to a wooden support. On a third farm, the oldest daughter had made three cups by fastening wire handles to tin cans, and the father had carved out of *cedro* a wash basin, with handles (pl. 20, f). On still another farm, the father had carved a *gamela*, or large, shallow bowl from wood, and made a simple lamp, by putting a wick into a *pinga* bottle.

The most adequately equipped house in the village is that of one of the storekeepers whose wife is from a town about 30 miles away and is accustomed to a standard of living somewhat above that common to the local community. Although the house is old, it was remodeled 2 years ago, at which time it was also freshly calcimined inside and out. The house measures about 30 by 24 feet and is 9 feet to the eaves. The walls are of brick and the roof of tile. Most of the windows are of glass and have wooden shutters. There is a dining room, a kitchen, a bathroom, and a bedroom. The floor of the dining room is of wood and is waxed. The bathroom is equipped with running water, both hot and cold, the former being heated as it

¹⁰⁵ See The *Cafézinho*, p. 124.

passes through a pipe in the firebox of the *poia*. The house is wired for electricity, which is furnished by a small generator, located on the *fazenda* which lies at the edge of the village. Only three or four other dwellings in the community compare favorably with this house.

The furniture in the dining room is of a quality superior to that seen elsewhere in the village or surrounding area and is better cared for. There are a factory-made table, six chairs with imitation-leather seats, two buffets (the only ones in the community), one of the two wall clocks in the village which strike the hours,¹⁰⁶ a china cabinet, and the only radio in the community.¹⁰⁷ A long corridor leads from the outer door to the dining room, from which another door opens directly into the space behind the counter in the owner's store.

There is a set of furniture in the bedroom, including a bed, a wardrobe, a dressing table, and a chair, and also a child's bed, all of which are factory-made. In the kitchen, there is a *poia* covered with tile which has an oven, an unusual occurrence. There is also a small sink, with running water, both hot and cold, and a factory-made table, chair, and two medium-sized cabinets for keeping utensils and supplies. In the bathroom, there is a small porcelain bathtub but no lavatory or stool. In the house live the storekeeper, his wife, and two children.

One of the least adequate houses in the village, which is similar however in most respects to a number of other houses, is 16 feet long, 12 feet wide, and measures 7½ feet to the eaves. The walls are of *pau a pique*, without either plaster or calcimine. In several places, the dried mud has broken and fallen off, leaving small holes through which insects and rain can enter. There are three rooms: a small bedroom, a tiny kitchen, and a small front room. The floors are of earth. The rooms are all without ceilings, the under part of the roof, which is of tile, being exposed. The two doors are of plain boards and the two windows are merely vacant spaces, with wooden shutters which are swung open during the day to admit light and air. The kitchen stove is a small, crude *poia*. The only utensils are a cast-iron pan and an enamel kettle. The bed is a narrow, cheap, factory-made

bed, with a corn-husk mattress and a worn cotton blanket. A box in the corner is used to keep the clothes of the family. A broom, made of fresh green branches tied around a pole, leans in a corner of the kitchen. There are no chairs. In the front room there are a box, a small table made of old boxes, and, leaning up in one corner, a hoe. A small unpainted shelf about 5 by 16 inches is above the table, on which are a few cans and a small mirror. In the house live a young couple and their 6-month-old child.

FUEL AND LIGHT

All families in the village and on the farms use firewood for cooking. In most cases, the supply is gathered from day to day, in a nearby piece of timber, usually by the women and children. Dead limbs and sticks are picked up from the ground and carried home in bundles on the head (pl. 7). Occasionally, the *foice*¹⁰⁸ and the ax are used to cut the larger limbs into convenient lengths.

Many women enjoy this task. "I like very much to go after firewood," said a woman in the village. "If we don't need any at the house, I go with the other women. It's a long way and there's a hill so steep you have to rest three or four times climbing it. But if I see someone coming back with firewood and they haven't asked me to go along, I don't like it at all."

All families in the village have either to bring firewood from nearby patches of timber or, in a few cases, to purchase it from someone who is clearing a piece of land. Of 17 farms visited, 13 have an adequate supply of firewood. One farm is without a piece of timber and the family has to buy all the wood used. On the three other farms, the supply is nearly exhausted and at least part of the firewood has to be bought. Corncobs and corn husks are used for kindling, and matches to set them afire. To economize on matches an attempt often is made to keep wood burning continually, at least during the day.¹⁰⁹

In all farmhouses visited and in all houses in the village except two, light is furnished by kerosene lamps, lanterns, or *lamparinas*. The lamps and lanterns are few. The *lamparina* consists merely of a small bottle or tin can about 6 inches

¹⁰⁶ The other is owned by the storekeeper's father.

¹⁰⁷ Since this was written, another village storekeeper has installed a radio with a battery set.

¹⁰⁸ See Tools and Other Equipment, p. 50.

¹⁰⁹ Pipes are often lighted with a burning twig from the fire.

high and $2\frac{1}{2}$ inches in diameter, supplied with kerosene, a metal cap, and a wick.¹¹⁰ An occasional villager or farmer owns a flashlight.

The two houses in the village that are supplied with electricity receive it from a small generator on the *fazenda* that lies at the edge of the village. Along a rock and cement channel about 16 inches wide and 20 inches deep, water flows from a nearby stream into a metal tube about 12 inches in diameter through which it drops several feet to turn a small turbine located inside a building, which then turns a small dynamo about 12 feet away. Light is supplied to *fazenda* buildings and the nearby village church, as well as the two houses.

On some farms, the limited amount of heat given out by the *poia* is occasionally supplemented, on the colder evenings and nights, by a fire placed on the earthen floor. If the night is quite chilly, someone may replenish it periodically during the night. One village family has an alcohol stove on which to make *café* without having to build a fire in the *poia*. Candles are commonly used in the family *oratórios*, although sometimes a teacup, or small glass, is provided with oil and a wick to use for this purpose.

DRESS

Men commonly wear light cotton shirts¹¹¹ and cotton trousers. Except on the colder days or upon special occasions, coats are seldom used. An occasional man owns a woolen cape which he wears on rainy days, draped over the shoulders and fastened about the neck. A leather belt, shoes, and a battered felt hat, all of which are factory-made, usually complete the clothing worn by the men. Neckties are rarely used. They are sometimes worn on Sundays and at religious or secular festivals and dances. At one of the latter, however, only 6 men among the approximately 50 present had on neckties. A few men in the village always wear ties on social occasions, as also does the administrator of the *fazenda* that lies at the edge of the village. The *juiz de paz*,¹¹² a farmer, wears a necktie when officiating at weddings. A villager

has three ties which he rarely uses and which he says are 17 years old.

Women usually wear light cotton print dresses. Especially on the farms but also in the village, these are often patched and sometimes ragged. Aprons are occasionally used. Hats are seldom worn, except when in the field, on which occasions an old straw hat may be used. On colder days, and when going to a nearby town, a cotton kerchief may be tied over the head. A faded umbrella occasionally is used when walking in the hot sun. Many women have at least a cheap coat to wear to Mass on the colder days. In the house, when it is cold, a cotton blanket may be worn wrapped about the head and shoulders of the mother and, perhaps, of the baby in her arms.

Men rarely go barefoot, a practice which is rather common among the women, both on the farms and in the village. The shoes worn by the men are occasionally of ankle length but are more commonly either oxfords or *alpargatas*, low shoes with rope soles and canvas tops. High leather boots or puttees commonly are worn as a protection against snakes while on uncleared land. Quite often, the women use slippers with toes of leather or of cloth, some of which have no backs. Neither men nor women wear stockings or socks, except on special occasions, such as Sundays or days of *feira*, when cotton or lisle may be worn, especially by the young men and women. A small girl occasionally uses ankle-length socks and a small boy the three-quarter length stockings common to the boys' dress in the cities.

Village men usually wear shorts but no undershirts. An occasional villager, however, and most farmers use *ceroulas*, or long, white, cotton drawers. The undergarments of the women usually are limited to light cotton slips and, less commonly, panties. Girdles are never worn. Only occasionally are handkerchiefs carried.

The clothing worn by the older children is similar to that of the parents. A boy usually wears a light cotton shirt and pants and a girl a light cotton dress and undergarment. When quite small, or up until around $1\frac{1}{2}$ to 2 years of age, a boy commonly wears at home only a lightweight shirt that reaches to the waist and a girl a similar garment, or a somewhat longer dress. An occasional child of this age, when at home, goes without clothing of any kind (pl. 5, *d*). Both boys and

¹¹⁰ The gasoline pressure lantern employed by researchers working on this study was so admired that shortly after field work began, similar lanterns were purchased by two of the local storekeepers, the owner of the principal *botequim*, the baker and a farmer.

¹¹¹ A young man recently was observed to be using a cotton undershirt in place of a shirt, an innovation in the community.

¹¹² See Division of Labor, p. 60.

girls go barefoot, except in the colder weather when some sort of footwear, usually leather sandals or light canvas shoes may be used.

Although the clothing when worn at work may be quite dirty and often ragged, that worn to Mass or to *festas*, dances, and other public gatherings is almost invariably clean and whole. The rather striking variation between the condition of everyday work clothes and those used on other occasions reflects an evident and intense pride and care in personal appearance when in public.

On a farm which was visited, the father was wearing a cotton shirt, cotton trousers, and low leather shoes, without socks. His wife had on a faded cotton dress and apron. She was barefoot. A 7-year-old boy also was barefoot. He was wearing light cotton pants and a light cotton shirt. His three sisters, aged 6, 10, and 12, also were barefoot. Each wore a light cotton dress. A 6-month-old baby had on a cotton dress, a cotton slip, and improvised cotton diapers. The clothes of the family, although patched, were clean. Another farmer who was visited on the same day was wearing a faded shirt, light trousers, and scuffed oxfords, without socks. His wife had on a threadbare dress and a light jacket. On her feet were old slippers. She wore no stockings. A 12-year-old boy was barefoot. He wore a light shirt and short pants. The grandfather was also barefoot and dressed similarly to the father. All the clothing of this family was of cotton and most of it was quite soiled.

On a chilly day when the thermometer registered approximately 0° centigrade, or freezing, a mother in the village was observed to be wearing a cotton blouse and cotton skirt and a light cotton jacket. She was barefoot and without stockings. Since 7 o'clock in the morning, she had been at the creek, washing clothes. Her 14-year-old daughter was wearing a cotton dress and a light cotton jacket. She also was barefoot and without stockings. A 10-year-old son had on a cotton shirt, cotton pants and canvas shoes, without stockings. A 62-year-old woman, who was observed on the same day, had on a cotton dress and apron and over her head and shoulders she wore a threadbare man's coat. She was barefoot and her hands were trembling with the cold. A 35-year-old woman who was accompanying her had on a cotton

print dress. She also was barefoot. A 7-year-old girl wore a similar dress, without sleeves. Her 10-year-old sister had on a light cotton dress, over which she wore a faded coat with long sleeves. Both girls were barefoot. A 7-month-old baby had on a cotton dress and a loose crocheted woolen jacket. On the same day, a farm mother and her two daughters, aged 9 and 13, were observed to be barefoot and without stockings. The mother was using the same dress, now showing much more wear, of thin cotton material which she had been using on the occasion of a previous visit, several months before. The two girls had on cotton print dresses with short sleeves. The wife of a village official, a woman 35 years of age, was wearing a cotton dress and apron and flannel slippers, without stockings. A 12-year-old girl had on a light cotton dress, over which she wore a cotton smock with long sleeves. She was barefoot. Five boys, aged 6 to 12, who were playing in the streets, were all wearing short cotton pants and cotton shirts. All but one boy had on canvas shoes; he was wearing *tamancos*, or slippers with wooden soles and a leather strap over the toe. A man was dressed in a shirt, trousers and coat, all of cotton. He walked bent over, as if suffering from the cold. Another man was dressed in a cotton shirt, cotton trousers, and a sleeveless jacket. He had on shoes and rude puttees. Most of the children had colds and several coughed from time to time. None had a handkerchief.

As has been indicated, most men, women, and children sleep in the same clothes which they have worn at work or play during the day. In warm weather, these may be reduced to undergarments. The children in a few families use pajamas and an occasional woman or girl, a nightgown.

Few ornaments are worn, except earrings, which are almost universal adornment for the women when dressed for a visit, Mass, *festa*, or dance. The ornaments are ordinarily of cheap alloy with imitation stones, except in rare cases where a more expensive heirloom has been handed down in the family. Cheap rings also are worn occasionally by the women, rarely by the men. Only one person, a young man in the village, wears a wrist-watch. The use of eyeglasses is comparatively rare, only three pairs having been observed in the community, two of which were being worn by

women.¹¹³ The *sub-delegado* uses a pair for reading.

PROTECTION: THE *FACA DE BAINHA* AND THE *GARRUCHA*

The *faca de bainha* (sheath knife) is often carried by men in the community. The blade varies from about 6 to 12 inches in length, is ordinarily around $\frac{3}{4}$ of an inch wide, sharply pointed at the end, and fitted into a wooden handle. It is not worn at the belt, as sometimes is to be seen in certain other communities in the State of São Paulo and other States of Brazil, where the prohibition by the authorities of its use is more openly ignored. It is carried instead in the coat pocket or under the shirt at the belt.

The primary purpose in carrying a sheath knife is to have an effective weapon with which to defend oneself on occasion. At a dance, sheath knives were observed to be carried by at least 5 of the 30 men present. "The dance will not be over until a late hour," explained a villager, "and the men have to go home on the open road." Two of the knives were carried in the coat pocket, and the other three under the shirt at the belt.

The *faca de bainha* is more often used, however, for any one of a number of other purposes: to cut tobacco from a twisted roll and trim corn husks to make cigarettes; to cut *cipó* to use in tying together the poles of a house, a fence, or other construction; to skin animals killed in the hunt; to make repairs on leather harness; to use when eating away from the house; and similar purposes.

The *garrucha* is an ancient firearm rarely to be seen today in the stores of the cities. It is a breech-loading, double-barreled pocket pistol about 10 inches in length. The barrels are around 5 inches long and of large caliber. The number of *garruchas* in the community is much less than that of sheath knives. They are used principally by persons who live on farms and who have occasion to travel at night to and from the village or to and from a neighboring farm. In most cases, they are carried by young men. When a young man arrives in the village, he may give his *garrucha* to the owner of the *bar* or store to keep until he is ready to go home, as a safeguard against possible impulsive action when under the stress of heightened emotion. This is sometimes

also done in the case of the sheath knife, especially while playing cards.

The carrying of these means of protection would seem to be more extensive than the actual danger to be encountered would warrant. The act is perhaps a vestige of a generalized habit which formerly had much more reason for its existence, since *valentões*, or "tough characters," were occasionally to be met, especially on the road at night, and there also was continual danger from wild pigs, *onças*, and similar animals. The extensive carrying of these means of protection today probably is due also, in no small part, to the belief, held intensely by many persons and at least to some extent by all, in the existence and maleficent action of mysterious forces.

TOOLS AND OTHER EQUIPMENT

The principal agricultural tool is the *enxada*, or hoe. It is not only used by every farmer in the community but is probably used on all farms more than any other tool and, on a few of the smaller farms, more than all other tools combined. It is especially employed in planting and for cutting grass and weeds out from around growing plants. It may also be used to mix mud for *pau a pique* houses, and similar purposes. The handle is usually a stick around 5 feet in length, cut from a nearby patch of timber, and as straight and smooth as possible to arrange. The blade is of iron, usually about 8 inches wide and 6 inches high, and rounded on the shoulders, although other forms and sizes are to be seen. It is factory-made and has been purchased at a store in the village or neighboring town.

The *enxadao* is a similar tool which is also much used, especially for turning over dirt somewhat as is done with a spade, except that the principal motion is a chopping motion; it is also used for digging holes or shallow furrows for planting. The blade is narrower and longer than that of the hoe and measures from 5 to 6 inches wide and is about $9\frac{1}{2}$ inches long. The *foice* also is much used, especially for cutting weeds and brush and trimming trees. The blade is curved, about 14 inches long and terminates in a blunt edge nearly 4 inches wide. The *podãozinho* is a similar instrument, except that it is smaller, being about 11 inches long and $1\frac{3}{4}$ inches wide. It is used to strip the leaves from stalks of cane and for similar tasks. The *cavadeira* is used to open small holes

¹¹³ One pair had been purchased without the assistance of an oculist or optometrist.

in the ground in which to plant maize, or to set bamboo or other small poles when building a light fence. It has a slender blade 10 inches in length which tapers from about 3 inches at the point to 2½ inches where the handle is inserted. The ax used locally has a steel blade about 7 inches long and a cutting edge which extends a little over 5 inches. The upper side of the blade is straight; the lower side, however, slopes inward from the tip until, at the handle, there is a width of only 3 inches. The sickle is used to harvest rice; it is factory-made.

The maul used locally for splitting wood always has an iron head. The wedge also is of iron. The pick is used on occasion, as also is the shovel. Like those of the *enxada*, the blades of the *enxadão*, *foice*, *podãozinho*, *cavadeira*, ax, shovel, and pick, and the head of the maul, are all factory-made, and the respective handles have been cut from local timber and fitted by the farmer.

The plow is used less than the extent of its presence in the community would seem to indicate. Both terrain and tradition are against it. The hoe is more easily handled on hillsides. The tradition of hoe agriculture, like the slash and burn technique, is deeply rooted. The plow is factory-made and has a steel share and moldboard. The fore part of the beam rests upon a small iron wheel. With the exception of bolts and braces, all the other parts are of wood. The *riscador* is a sort of diminutive lister used to open shallow furrows for planting. It also is factory-made. The share is of steel; all other parts are of wood. The *gráde* is a simple, triangular harrow made by the farmer or a village carpenter. Each side is about 4 feet long. The frame is of wood and the teeth are iron spikes. The village carpenters and most farmers have handsaws. The *traçador*, or cross-cut saw, also is occasionally used.

The *facão*, or machete, is a useful instrument for cutting one's way through vines and dense undergrowth in the *mata*. It is a long and sharply pointed knife with a slightly curved cutting edge. The blade is of steel and usually measures about 16 inches from handle to tip and varies in width from about 1½ inches at the handle to 2¼ inches at the point of curvature. It is factory-made and usually is worn at the belt in a leather sheath. Further details of these implements may be observed in figures 8 to 11 and plate 15.

As has been indicated, there are used for hunting or protection, the rifle, shotgun, *picapau*, slingshot, *garrucha*, and *faca de bainha*; and for catching fish, the *covo*, *tarrafa*, trotline, fishpole, line, and hook.¹¹⁴ The *arapuca*, used for trapping game birds and small animals also has been described elsewhere.¹¹⁵

Threshing beans is accomplished by piling the beans and beating them with long, pliant sticks (pl. 11, c). For winnowing, the *apá*, or winnowing tray, and the *peneira*, or sieve, are universally employed. Each is woven of *taquara*, is round in form, and measures approximately 24 inches in diameter. The *tipiti* for squeezing *cidra* when making *cidrão* is described elsewhere.¹¹⁶

The *monjolo*, once widely used for crushing maize, rice, and other foodstuffs is disappearing from the community. Villagers will say, "*Cabou*" (It is gone). If one visits about the countryside, however, he will find at least six farmers whose *monjolos*, although seldom used, are still in good order and will function on occasion. One farmer has two, both of which he sometimes uses.

The *monjolo* consists of a large mortar and pestle, operated by water power (fig. 12). A wooden "hammer" is mounted on an axle and made to operate like a walking beam, alternately raising its head and dropping it into a wooden mortar. A beam observed on a farm in the community is about 9 feet long, 10 inches wide, and 6 inches thick. It is made of *jacarandá* which, as has been indicated, is a hard, durable wood. The head, or *mão* (hand) as it is called, is also of wood and is fitted into one end of the beam. It is somewhat pointed on the lower end so as better to fit, as it drops, into the mortar below. In the opposite end of the beam, a trough has been cut about 18 inches long and 4 inches deep. The mortar also has been made of *jacarandá*. It is firmly set in the ground, out of which it extends about 16 inches. The upper portion has been hollowed out to leave a cavity about 14 inches in diameter at the top whose sides gradually slope inward until, at the bottom, the cavity is only about 2 inches in diameter.

The *monjolo* is set up at the side of a small stream from which water is diverted and made to

¹¹⁴ See Hunting, Fishing, and Trapping, p. 32.

¹¹⁵ See The Arapuca, p. 85; also plate 20.

¹¹⁶ See Sugar Making, p. 88.



FIGURE 8.—Farm tools. a-c, Blades of three types of *enxada*, or hoe. d, Blade of *enxadão*. e, *Foice*. f, *Cavadeira*. g, *Ax*.

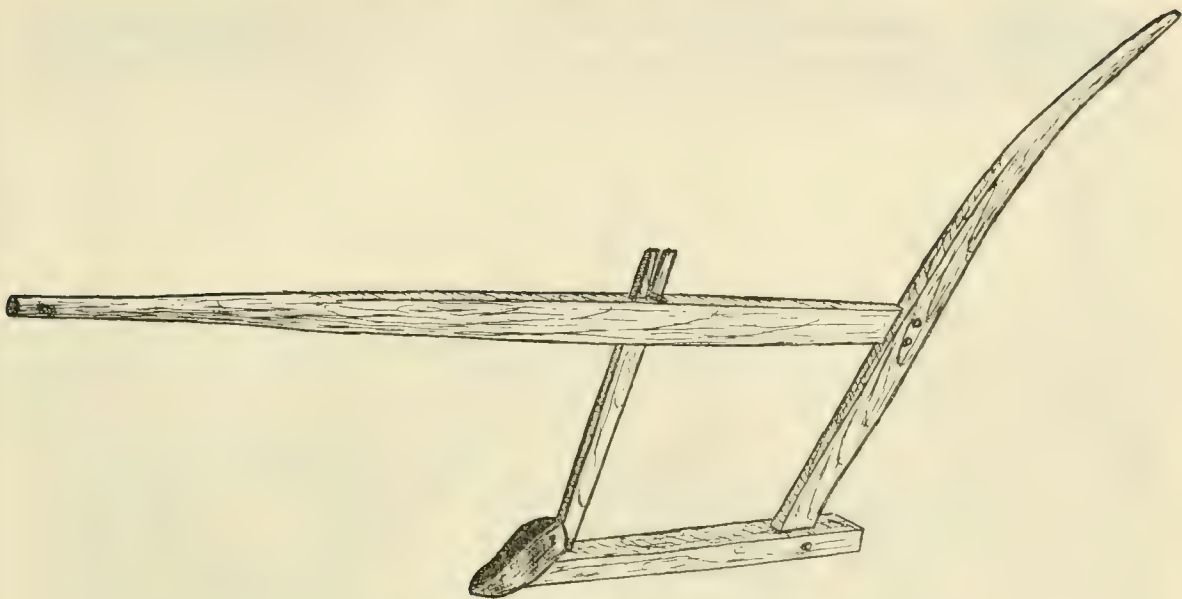


FIGURE 9.—*Riscador*, a kind of lister, used to make shallow furrows for planting ($\frac{1}{10}$ natural size).

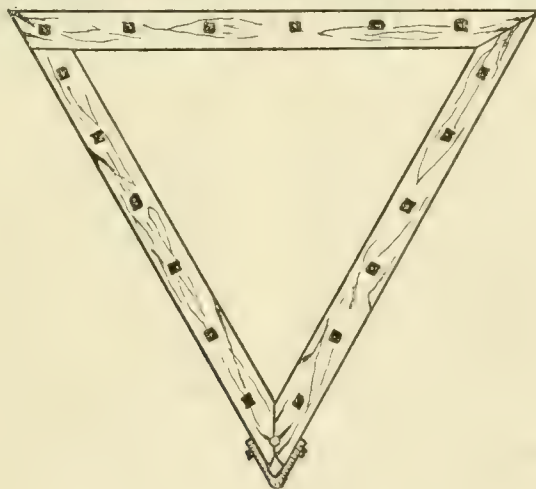


FIGURE 10.—*Grãde*, or crude harrow, made of wood, with iron teeth. Each side is about 4 feet long.

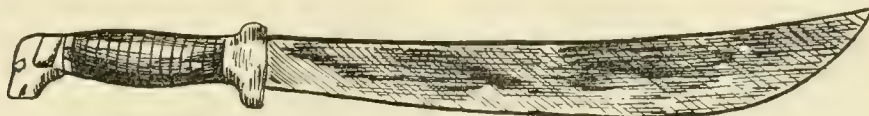


FIGURE 11.—*Facão*, or machete ($\frac{1}{5}$ natural size).

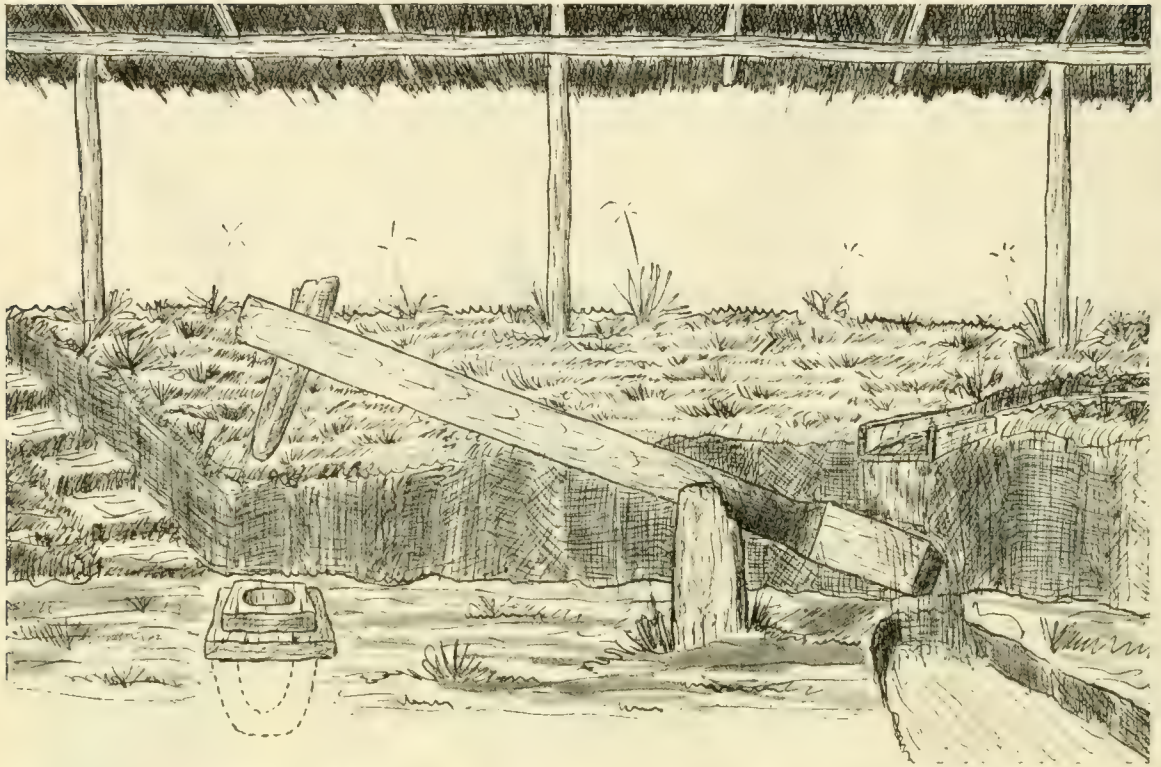


FIGURE 12.—*Monjolo*, or large mortar and pestle driven by water power.

fall into the trough. As the trough fills, the weight of the water pulls this end of the beam down, automatically raising the head at the opposite end, and simultaneously spilling the water out of the trough, which thus releases the head so that it drops with considerable force into the mortar. This action, repeated over and over, eventually pounds into a relatively fine powder whatever is in the mortar.

The *monjolo seco*, or "dry" *monjolo*, and the *pilão d'agua*, both once used in the community, have disappeared. The *monjolo seco* was similar to the mechanism described above except that it was operated with the foot instead of water power. The operator stood on an elevation at the end of the beam opposite the head while alternately stepping upon the beam and releasing it, thus automatically raising and dropping the wooden head. "It wasn't so hard to work," recalls a local resident. "Someone would take it for a while, someone else would relieve him, and so on."

The *pilão d'agua*, or *tutúca* as it was also called, consisted of from two to six walking beams similar to that of the *monjolo* except that each was considerably smaller and lighter. The beams were lined

up side by side, and each set to have its hammer alternately raised and dropped into a mortar. At right angles, a wooden cylinder several feet long was turned by water power. Into the cylinder, some inches apart and at varying positions on its surface, were driven as many lugs as there were walking beams, each of which, as the cylinder turned, would, in succession, catch the end of a beam, push it downward and then release it, thus alternately raising and dropping, one after the other, the wooden heads into their respective mortars. "You couldn't get enough maize," said a local farmer, "to keep a good *tutúca* going."

Also used in manufacturing processes are the *mós*, or grinding stones; the *forno*, or oven for baking bricks or pottery, making charcoal or toasting maize flour; the *alambique*, or still, for making *pinga*; the mold and the *bodoque*, used in making brick; the skimmer used in making *rapadura*; the wooden rake used in making charcoal; and the water wheel. These instruments are all described elsewhere.¹¹⁷ One villager and a few

¹¹⁷ See sections on Grinding Maize, p. 86; Sugar Making, p. 87; Brickmaking, p. 89; Pottery, p. 84; Distillation of Pinga, p. 90; Making of Charcoal, p. 90.

farmers own hand-powered corn shellers which are factory-made. Most farmers have a simple press for squeezing out cane juice, called the *engenho*. It may be operated by either hand or animal traction. An *engenho* observed on a local farm had iron cogs, stood about 6 feet high, and was turned by means of a horizontal pole about 19 feet long. Occasionally, the cogs are of wood (pl. 15).

The *poia*, or local stove; the *pilão*, or mortar; the *girau*, or wooden platform; the *gamela*, or wooden bowl, the wooden basin for bathing, and the iron and sewing machine, all to be seen with greater or less frequency in village and farmhouses, are referred to elsewhere.¹¹⁸

Used locally in transport are the riding saddle, *charrete*, *carroça*, oxcart, *carrinho*, *caçamba*, pack-saddle, wheelbarrow, and boat, together with certain accessories, such as the yoke, goad *picuá*, *jacá*, bridle, and harness. The *charrete* is used for carrying persons. It is an open, two-wheeled cart with shafts for a horse or other animal. The *carroça* is a similar cart for delivering milk or chickens or other light produce. The oxcart is usually about 6½ feet long and 3½ feet wide and clears the ground 2 feet at the axle. The tongue is built into the body of the cart so that the cart tilts as the tongue is raised. Some oxcarts have solid wooden wheels, called *rodas duras*, held on a wooden axle by a wooden pin; others have iron-rimmed wheels with wooden spokes and an iron axle and may also be fitted with a hand-operated brake. In either case, loads are held in place by wooden uprights spaced about every 18 inches, inside which a long, pliable mat made of *taquara* may be stood on end and bent in an oval to form a relatively tight box approximately the length and width of the oxcart and about 4 feet high. The *carrinho* is a miniature oxcart pulled by hand and used to carry light objects. The *caçamba* is similar to the oxcart but is smaller and has wooden sides and ends. It is used for hauling dirt. Boats are built locally of boards sawn from native timber and are maneuvered with poles and paddles which have been cut in the *mata*.

The packsaddle is composed of a heavy pad laid over the animal's back and an upright of wood supported by it on either side, from which large baskets are suspended. It is held in place by wide

leather straps which pass around the animal's breast, under the belly and over the rump. A second pad is placed under the baskets to protect the animal from friction. The local riding saddle is similar to a western saddle except that there is no horn and the bow is wider and set in such a way that the legs of the rider, provided he is thin enough, fit under it. Saddlebags of raw cowhide are sometimes used. The *cilhão*, or ladies' side saddle, is occasionally seen hanging on the wall in a farmer's house, but is rarely used today.

The central portion of the ox yoke is of wood, as also are the uprights that fit on each side of the animals' necks. Fastenings are of leather. The goad is made of a stick about 5 feet in length, to one extremity of which is attached a small spiked wheel. A lash of braided leather about 3 feet long also is fastened to the stick. The *picuá* is a simple cloth sack used for carrying small objects while traveling on horseback or on foot (pl. 2, f). The *jacá* is a rectangular basket with rounded corners, made of *taquara*. It is attached to each side of a packsaddle and is used for carrying grain, fruit, and similar objects. The size varies. A pair observed being used were each about 20 inches long, 16 inches wide, and 30 inches high. The headgear of bridles is of leather; the reins are sometimes of leather, occasionally of rope. The harness is of leather, rope or chain. The *bocó*, also called the *patrona*, is a canvas or leather satchel used to carry food or ammunition. One farmer in the community was observed to own a sled. It has wooden runners and was said to have been introduced into the region by Japanese. Further details of these means of transport may be seen in plates 13 and 14.

On 17 farms visited, the tools and other equipment owned by farmers were as listed in table 9.

TABLE 9.—Equipment on 17 farms, Cruz das Almas community, 1948

Kind of equipment	Number	Kind of equipment	Number
Hoe.....	96	Engenho.....	8
Enxada.....	45	Harrow.....	8
Foice.....	45	Mós.....	4
Ax.....	33	Charrete.....	4
Hammer.....	29	Carroça.....	4
Cavadeira.....	22	Covo.....	4
Pick.....	19	Crosscut saw.....	3
Packsaddle.....	19	Oxcart.....	2
Facão.....	18	Caçamba.....	2
Hand saw.....	16	Podãozinho.....	1
Pilão.....	13	Tarrafa.....	1
Plow.....	11	Boat.....	1
Wheelbarrow.....	10	Carrinho.....	1
Maul.....	9	Sled.....	1
Monjolo.....	8		

¹¹⁸ See Dwellings and Furnishings, p. 42.

WEIGHTS AND MEASURES

Although the metric system of weights and measures is standard for Brazil, several units of length, surface, and capacity commonly used in the community vary from those employed in the cities. The Government, for instance, lists all land for taxing purposes in *hectares*; but farmers in the community universally count the size of their holdings and those of their neighbors in *alqueires*. The *alqueire* is subdivided into the *arefa*, *braça*, and *palmo*. The *palmo* is the span, or the distance from the thumb to the tip of the little finger when the thumb and fingers are extended; it is equated in the metric system at 20 cm. The local *braça* is the space covered by the outstretched arms; it is equated at 2.2 meters. The *arefa* (task) apparently was originally the area of land a man could be expected to work in a day with a simple implement like the hoe; it is equal to an area 12.5 *braças* square. The *alqueire* is 32 *arefas* or 5,000 square *braças*. One-fourth of an *alqueire* is called a *quarta* (fourth). The term *alqueire* is also employed as a unit of capacity; as such, it is equal to 50 liters. A unit of weight generally used in the community and sometimes still used in the cities is the *arroba*; it is equated at 15 kg. A common unit of distance is the *legua*, or league; it is equated at 6 km.

DIVISION OF LABOR

Specialization, except that which is identified with the sex division, is little developed in the community. Nearly all men, whether living on farms or in the village, work with the soil and produce food. Even those few villagers who give most of their attention to other employments, usually spend at least part of the time tending a piece of land which they own or rent outside the village, or a small garden back of their houses, or they occasionally work for wages on the *sítio* or *fazenda*¹²⁰ of a farmer in the community.

At the same time, the increase of population under the condition of a static land supply has left several families with little or no farm land of their own. There also are a few other landless families, especially among those which have migrated to the community, as well as a few unattached individuals who also own no land. Considering the fact that

there is virtually no farm land in the community which is not occupied, the heads of these families, and the unattached individuals, must find employment elsewhere. If they are not engaged as day laborers on the *sítios* and *fazendas* of the more advantaged families, they may find work at the quarry, in the limited opportunities still existing for cutting timber and making charcoal, or driving a truck (three individuals). Other exceptions are the *padre*, the registrar of vital statistics, the mail carrier, the baker and his two sons, the *soldado*,¹²⁰ the horseshoer, the tinsmith, the three storekeepers and the owners of *botequins*.

A few men, in addition to working with the land, add to their incomes by part-time employments of a different character. These include barbering, carpentry, basketry, grinding maize, and making *rapadura* or *pinga*. A man who owns and works a small farm about a mile from the village, comes in every Saturday and Sunday to cut the hair of villagers and farmers and, more rarely, to shave them. He also builds coffins and, more occasionally, makes rough benches, tables, or chairs. At least three men make baskets for their neighbors. (See Basketry, p. 83.) One villager knows how to cut and lay rock for rough sidewalks as needed (see pl. 13, f), and a farmer knows how to repair drums on occasion. Two farmers operate mills for grinding maize (see Grinding Maize, p. 86) and one makes *pinga* (see Distillation of Pinga, p. 89).

As is indicated in greater detail in the section on *Vendas* (p. 91) there are three storekeepers in the village who give all their time to tending their stores, as also do the owners of the two *botequins*. Two of the storekeepers, however, as well as both of the owners of *botequins*, also own farms. The horseshoer estimates that he shoes from 40 to 50 horses, mules, or burros a month. "It's rare for a day to go by," he says, "without at least one animal to shoe." He also does some barbering and in addition, puts half soles on shoes for villagers.¹²¹ Most of the work done by the tinsmith is limited to soldering handles onto cups and pails. Two years ago, a 64-year-old farmer left his farm and purchased the village bakery where, together with two of his sons, he now bakes all the bread

¹²⁰ See p. 60.

¹²¹ In addition, this man has a license to drive a truck, although at present he is not working at this employment.

¹¹⁹ See *Sítios and Fazendas*, p. 64.

consumed in the village and surrounding area, as well as simple cakes and pastries. (No housewife, as has been indicated, bakes bread.)

One man in the community is especially adept at making charcoal, and devotes most of his time to this occupation. He takes great pride in his work. He says:

I have been making charcoal for nearly 30 years. When I was a small boy, I began to build *caieiras*,¹²² only little ones at first, of course, and then bigger and bigger ones. Making charcoal is a beautiful work, if you have the knack for it. You do get pretty dirty, but if the job is done right, it gives you real pleasure. I enjoy watching a *caieira* burn well; I like to see that little spiral of blue smoke come out while I control the burning and, when the wood is all cooked, to take out that fine, firm, charcoal of the best quality. A sack of charcoal, when the sacking has been done right, is a pretty thing to see. At the mouth, you put in a few long pieces, and then sew the sack with string in a neat way. Sometimes, though, I take great pains to do everything right and then when the buyers come, they throw the sacks around any old way so that by the time the charcoal gets to the city it's all broken up. It hurts you to see those fellows doing that after you've taken so much pains to make the charcoal just right.

Twenty-eight men are at present employed in preparations for quarrying.¹²³ Eleven of them live in the village. All were formerly farmers or farm laborers. Most of the income of their families at present, however, comes from this employment, 6 days a week, if the weather permits. When rain is heavy, work has to be suspended and incomes consequently suffer; this is especially true during the rainy season, when work is often interrupted.

There is no physician, nurse, dentist, or pharmacist¹²⁴ in the community, the nearest specialist of this sort being in the towns of Boa Vista and Piracema. During the past few years, however, a dentist who lives in São Paulo and whose sister is the wife of the administrator of the *fazenda* that lies at the edge of the village, has been spending week ends in the community, doing dental work.¹²⁵ Disease is ordinarily treated by one of at least three *curandeiros*¹²⁶ in the community, one of whom lives near the village, one some 5 miles away, and the other on the margin of the com-

munity; or by the *benzedadeiras*, or "blessers,"¹²⁷ three of whom live in the village, one about a mile away and another near the bend in the river, some 8 miles from the village by road. One of the village officials keeps on hand antitoxin and a syringe, to use, on occasion, in the treatment of snake bite. He also gives injections, the technique for which he learned while in army training some years ago. In addition, he sometimes sends a note to a physician in Boa Vista regarding the symptoms of a person who is ill and receives and administers remedies prescribed by the physician.

The only sacred specialist who gives full time to his employment is the *padre*. The *capelão*,¹²⁸ however, the village sacristan and bell ringer, the *leiloeiro*, the acolytes, and the patronesses also assist, on occasion, in the rituals of religious ceremonies and festivals. Each of the "blessers," who also obviously are sacred specialists, has other and more common employment.

The activities of the *padre* are more fully described in the section on Sacred Functionaries. Although he gives full time to his profession, he does not give full time to the village community. He lives at the Seminary in a neighboring city where, on weekdays, he teaches. He comes to the village each Saturday and remains over Sunday.

A characteristic feature of village life is the ringing of the church bells (see pl. 9, *a*). The bell ringer is a man 68 years of age, of low stature, and crippled in one leg. He earns a frugal living tending a small piece of land, which he owns near the village, and working for other farmers. His status is more specifically defined, however, by his work as the village bell ringer, combined with his services as sacristan of the village church. He is known throughout the community, and has been known for years, simply as *João Sineiro* (John, the Bell Ringer), his original surname being long unused and largely forgotten.

He takes great pride in his work. He plays many improvised rhythms, at times gay and lilting, at others, solemn and sad. The "announcements" of Masses and *rezas* are played in a variety of ways, rarely lapsing into mere routine, even when repeated, as they are in May and June, day after day. The bell ringer is quite conscious of his role.

¹²⁷ Individuals who treat disease with magical formulas. The three *curandeiros* are also "blessers."

¹²⁸ See Sacred Functionaries.

¹²² See Making of Charcoal, p. 90.

¹²³ See Preparations for Quarrying, p. 36.

¹²⁴ Since this was written, a man from São Paulo has moved to the village and has on sale in his home a small stock of drugs.

¹²⁵ Since this was written, the dentist has purchased a house in the village and has begun to spend more time there.

¹²⁶ Individuals who treat disease with herbs and other folk remedies, including magical formulas.

Although the use of a coat, as has been indicated, is not customary in the village, he always wears a coat when he comes to the church to ring the bells. He is punctual. Near the appointed hour, he may be seen coming along the street, his eyes usually fixed on the ground but occasionally lifted as he greets, with seriousness and circumspection, an acquaintance. At the same time, he is quite modest. "Yes, I ring the bells a little," he says. "Not very well. But there's no one else who wants to ring them and so I go on doing the best I can."

The church is the principal structure in the village and, in comparison with the homes of the community, is well preserved and cared for. One commonly hears expressions of pride on the part of villagers in their church. Consequently, the ringing of the bells has a prominent place in the life and thought of the community and, with it, also the bell ringer.

The mail carrier brings the mail on foot from the nearest point on the rail line. Although he owns a horse, he rarely uses it for this purpose. He is 56 years old. Rain or shine, through dust and mud, unless the rain is extremely heavy or prolonged, he has made the two-way trip daily, except Mondays, for 24 years. Like the bell ringer, his task has become his name so that to all the community, and to many in it who do not know or can with difficulty recall his actual surname, he is *João Correio* (John the Letter Carrier). He also prepares and sets off fireworks for village festivals,¹²⁹ and if occupied with the latter task may, especially in recent years, let someone else, usually his son-in-law, substitute for the day at carrying the mail.

The present village grave digger is a white-haired man, 57 years old, who has had this responsibility for 12 years (pl. 9, g). He is also charged with keeping the cemetery cleared of weeds and grass, and the water reservoir clean and functioning properly.

On days of religious *feira*, the *leiloeiro* is an important and essential personage in the community. He has the task of auctioning the *prendas* which is ordinarily done sometime between the morning Mass and the afternoon procession. The *prendas* are objects which have been donated by parishioners to help those in charge of the *feira*

pay expenses. The *leiloeiro* must possess certain characteristics which are relatively rare among the population: the ability to appear prominently in public without self-consciousness and to engage and to hold the attention of a group of people over a considerable period of time by speaking freely and without embarrassment. His task is to seek by humorous statement, exaggerated gesture, and the use of unusual words, to provoke good-humored and spirited bidding on the part of those present. Upon the ability of the *leiloeiro* obviously depends the financial success of the *feira*.

The present *leiloeiro* is Bicáva, a Negro man about 5 feet 4 inches in height, active, energetic, and facile in vocal expression. He is noted for exaggerated body movements and unusual words. He is pleasant in manner and well-liked.

At the appointed time, during a recent *feira*, one of the leaders called to the *leiloeiro*, "Bicáva, isn't it time to begin?" To which he replied, "Yes sir, you should order and not ask. Where is the little hammer? Let's make money for the *santo*!" And taking up his position in the *barraquinha*, or shelter for this purpose, erected in front of the church (pl. 17, d), he continued to speak as if automatically, saying, "Gentlemen and ladies, let's begin the auction of the *feira* for Nossa Senhora da Piedade. Let's start with this beautiful water glass. Look, my good people, what a pretty, attractive glass it is! And you can have it for only two cruzeiros! Who will give me that insignificant sum for so lovely a glass? See, it has flowers painted on it! All you have to do is to put it on top of the table and the house is decorated. You don't even need any flowers." As someone raised a hand, indicating that he would bid two cruzeiros, Bicáva speeded up the rhythm of his speech, "My good people, this glass has someone who wants it. Is there no one who will give more? Only two cruzeiros for a beautiful glass like that! It is worth much more. You, Dito (addressing himself to a young man who was standing near the girl to whom he was engaged), look at this fine present for the young lady!" At which, the bid was raised to two and a half cruzeiros. "Two and a half cruzeiros is bid for this glass, my good people! Who will give more?" And the *leiloeiro* continued until no more bids were forthcoming, when he called out, "Five cruzeiros, I give

¹²⁹ See Making of Fireworks, p. 83.

you one (striking once with the hammer), I give you two (striking again). No one will give more?" Pausing and carefully looking around the crowd, he then added, "I give you three, and sold to that gentleman there. Here it is, my friend, the glass is yours. Come up and get it and put your *gaita*¹³⁰ in the basket." Taking up a roasted chicken, Bicáva then said, "My good people, a roasted chicken that smells mighty good. It was roasted by Quim (a villager whose skill in cooking is well known). It is something very special. You can have it for only 15 cruzeiros * * *."

As he continued, Bicáva became more effusive and his efforts were more and more admired by the bystanders who were enjoying the mannerisms that accompanied the words, watching and listening with quite evident interest and pleasure. His original selection as the village *leiloeiro* was an informal process, and reflected a general feeling that his abilities dictated that choice. Not only in the village, but at religious *festas* held at wayside chapels elsewhere in the community, he is asked to serve as auctioneer. His status in the community undoubtedly is enhanced by this role, in which he feels secure since there are no prospective competitors. Once when he was unable to be present and another man was substituted, persons were heard to remark, "*Quá!* to do an auction right, it's Bicáva that's needed."

The *fogueteiro*, or man who makes the fireworks used at village *festas* also has an important function which is described elsewhere (Making of Fireworks, p. 83). As indicated, this is done by the mail carrier, as also, in most cases, is the actual setting off of the rockets, although on occasions when he cannot be present, either at *festas* in the village or elsewhere in the community, another man may take his place (pl. 19, d).

Officials appointed by either the State or the *município* government include the tax collector, the registrar of vital statistics, the *sub-prefeito*, the *fiscal* of the *prefeitura*, the village grave digger, the *juiz de paz*, the *sub-delegado* and the *soldado*. The tax collector keeps the State tax list for the *distrito*, furnishes information to owners of real estate, and collects taxes laid upon it. The present official also owns and works a farm. He is especially proud of the way in which he has

discharged his responsibilities. "I have been tax collector for 29 years," he says, "and I've never had the least complaint either from my superiors or from people in the community. The inspector in Boa Vista goes over my books every month. In all these years, there's never been the least thing wrong with them. Not the least thing!" In the community, he is known and respected as a person and not merely as an official. When the tax rate is raised, complaints are directed at "the Government"; never at the man himself. "He only does what the Government tells him to do," villagers and farmers say. "He has to obey the law." The collector is looking forward to retiring on a pension next year. "The work isn't so hard," he says. "But I like to fish, and when I have work to do, I can't go fishing. Suppose I closed and the inspector came and found me away; it would be awful. If I retire, I can go fishing whenever I like."

During the past 49 years, there have been four registrars of vital statistics in the village, one of whom served nearly 40 years. The present registrar has been 6 years in the village. He is an able and conscientious public servant, 57 years old. He also takes pride in discharging his obligations well. "If I can help it," he says, "nothing goes unrecorded."

The *sub-prefeito* serves without pay under instructions from the *prefeito*, or principal administrative officer in the government of the *município*, the seat of which is located in Boa Vista. The position is at present vacant in the village, the *fiscal* assuming the few responsibilities involved. The *fiscal* normally is charged with collecting fees for licenses, charges for water service from the village reservoir, and similar levies. The present *fiscal* also owns and works a small piece of land. The *sub-delegado* is the law enforcement official under orders of the *delegado* at the seat of the *município*, and also serves without pay. The present *sub-delegado* is a farmer and part-time carpenter who recently sold his land and moved to the village. He is usually asked to build the doors and windows for a new house and, on more rare occasions, to make rough tables and chairs. He also constructed one of the three water wheels in the community (see pl. 15, c). "This is the third time in 20 years," he remarks with pride, "that I've been named *sub-delegado*. My boss in Boa Vista says, 'You handle things very well.' There really isn't much to do.

¹³⁰ Slang expression for money.

On Saturdays and Sundays, someone may drink a little too much and I may have to let him cool off over night in the village jail. That's about all." The *soldado* is a soldier from the regular army, stationed in the village under the orders of the *sub-delegado* to assist in enforcing the law. Petty infringements are handled entirely by these two men, the *sub-delegado* ordering imprisonment in the village jail, if he thinks wise, for as long as he deems necessary. More serious offenses are referred to the *municipio* officials in Boa Vista, the culprit in the meantime being lodged in the village jail.

Formerly, the principal function of the *juiz de paz*, or "justice of the peace," was, it is said, to decide disputes over land, especially boundary disputes. He also presided at the civil marriage ceremony, a function which appears today to be the only function of the office, to which, however, considerable prestige still attaches. The present *juiz de paz* is a local farmer and his substitute is one of the village storekeepers.

The women, both on the farms and in the village, look after the children, cook, wash clothes, dishes and kitchen utensils, sweep, gather firewood, carry in water and otherwise care for the house and family. Most farm women and a few women in the village work in the fields on occasion, especially when the husband or father needs to complete a certain task before the weather changes. An occasional woman is especially fond of working in the fields. "My mother liked much more to plant or to hoe," said a young farm woman, "than to work in the house. She'd put one of my older sisters in charge of the younger children and she'd go out and spend the entire day in the fields." "For me," said another farm woman, "the work of a woman in the fields is the same as the work of a man." The proportion of the time so spent by women throughout the community, however, is not large.

Most women also know how to mend, and a few do other sewing. At least three women know how to make pottery but at present only one woman actually works at it and then only on infrequent occasions.¹³¹ Two girls at present are working as "servants," one for the wife of the administrator of the *fazenda* that lies at the edge of the village,

for which she receives food and some clothing for herself and an invalid mother; the other, for a school teacher, for wages. A third girl recently helped for a few days at the home of a villager whose wife was ill.

The relation between "servant" and employer, however, is markedly different from the usually more impersonal servant-employer relation of the large city; it is the relation of the members of one village family to the daughter of another village family. When at work, the girl receives instructions from her employer, but ordinarily in a less direct manner than if she were working in the city. The villager referred to above, for example, whose wife was recently ill, remarked of the girl who was helping at his house, "I think she must live to sleep. I am usually up early in the morning and I light the fire to heat water to make *café*. An hour later, the girl is still snoring. I go up near the bed where my little boy is sleeping and I call out to him, 'Pedro, it's time to get up! You must get your work done!' I always holler loud enough for the girl to hear."

The "servant" is otherwise treated with virtually the same intimacy as if she were a member of the family. When visitors call, she joins in talking to them. At dances, she is a *dama*, or dancing partner, just like any other girl, the men dancing equally with her and with her employer. Between dances, the "servant" seats herself among the other girls and women and converses on equal terms with them. A number of girls and women sometimes stroll arm in arm along a village street, especially at *festas*, and on several occasions the "servant" of the school teacher has been observed walking thus with a group of girls and women, including her employer.

One farm woman, in addition to caring for her husband and children, is the principal midwife in the community.¹³² She has had considerable experience, and her prestige as a midwife is high. She takes great pride in her work. "I've never had to call in a doctor to help me," she says. At least four other women sometimes also act as midwives and several others more occasionally, especially if the woman in childbirth is a member of the family or a close friend.

¹³¹ See section on Pottery, p. 84.

¹³² See also Leadership, p. 207.

Five women in the village and two farm women¹³³ add to the family's living by doing sewing, cutting out, and stitching together such items as simple cotton dresses and men's trousers and coats. Five village women wash clothes for families other than their own, on those infrequent occasions when the wife is incapacitated by reason of childbirth or illness. One farm woman occasionally makes saddle blankets. A married woman and two widows eke out a precarious living by receiving men, as part-time prostitutes.

There are two school teachers in the village: one came this year from São Paulo, the other from the same city 15 years ago, shortly after which she married a young man in the village and continued to live in the community, to whose way of life she has now been almost completely assimilated. The work of the school teachers, like that of the tax collector, the tinsmith, the registrar of vital statistics, the postmistress, and one of the part-time barbers, is carried on in private houses; in all cases except those of the barber and the teachers the work is done in the worker's own home.

In general, the men are expected to provide for their families by doing most of the work on the farm, especially the heavier tasks, or engaging in some other occupation which will at least provide the food, clothing, shelter, and other necessities for their families. The women have the responsibility of caring for young children and doing the housework. They may also work in the fields, and especially in the gardens, and they usually help raise poultry and livestock. Hunting, fishing, and trapping are exclusive occupations of the men.¹³⁴ The children early in life begin to help their mothers, especially in caring for the younger children, bringing in firewood and water, and soon are also assisting with at least the lighter tasks in the fields.

AGRICULTURE

As has been indicated, the basic means of subsistence in this community is agriculture. The principal crop is maize. Of 17 farms visited during the growing season, for instance, all but one had maize in production, the area per farm rang-

ing from 11 *alqueires* (65.6 acres) to 16 *tarefas* (2.9 acres). The fields of maize represented 61.7 percent of the total area in cultivation.

Beans are the second largest planting in the community. Of 17 farms, all but one had beans growing, the area ranging from 5½ *alqueires* (32.8 acres) to 1 *tarefa* (0.18 acre) per farm. This represented 16.7 percent of the total area in cultivation. Sugarcane was being grown on 14 farms, rice on 10 farms, onions and potatoes on 8 farms each, manioc on 7, peanuts on 6, sweetpotatoes on 4, *cará* on 3, and tobacco and coffee on 2 farms each. Unfortunately, statistical data on production in the area in recent years is given only by *municípios*, so that it is not possible to know the extent to which these various crops are grown on all farms in the community, as well as the total production.

It is clear, however, that the area is not a one- or two-crop area as many regions in Brazil have been in the past and, in several cases, still are. On the contrary, considerable diversification is evident. Of 17 farms, no farm had less than two crops planted; the average number of crops was 6 and the maximum, 11. In addition, all farms except three had at least a small piece of ground in pasture for livestock. On the farm which had only two crops, beans and sugarcane were growing. One of the four farms with eight crops had in production maize, beans, rice, onions, manioc, sugarcane, peanuts, and tobacco. On the one farm with 11 crops, there were growing maize, beans, rice, potatoes, onions, sugarcane, peanuts, sweetpotatoes, tobacco, *cará*, and coffee (three trees).

The size of fields, however, is comparatively small; in fact, the areas cultivated ordinarily have more the character of plots or patches than of fields, as known, for instance, in the United States. The largest crop planted on the 17 farms was only 65 acres, and this was divided into 10 different plots. Of the total of 101 plantings, 22 or approximately a fifth, were only a *tarefa*, or less, in size. In six cases, the amount in cultivation was measured in number of plants: "25 sweetpotato plants," "120 manioc plants," "150 tobacco plants," "200 manioc plants," "3 coffee trees," "20 coffee trees."

The amount of land under cultivation at any one time also is not large. Two of the 17 farms visited are *fazendas* being cleared of timber and sown to

¹³³ One is a widow who also washes for other women, is a "blesser" and, occasionally, acts as a midwife.

¹³⁴ The wife of one of the village officials sometimes accompanies her husband on an overnight fishing expedition to the river, "because he doesn't like to cook and make *café*."

grass for pasturing cattle (see p. 77). The 15 other farms comprise a total area of 213.5 *alqueires* or 1,275 acres. Of these 1,275 acres, only 236 were in cultivation at the time the farms were visited, although this occurred during the principal growing season, in January and February. There were 573 acres in pasture, of which 540 acres were on one farm; 30 acres were in timber. The remaining 436 acres either were waste land or were lying fallow.

Most produce is consumed on the farm or within the community. The two principal money crops at present are potatoes and onions, although some maize and beans also are sold.¹³⁵ Although the growing of onions as a money crop apparently is increasing, some farmers are giving up this crop in favor of maize and potatoes. "You must have rain at just the right time," said a farmer, "to set out the young plants, and you don't always get it. When it does rain, you need a lot of help so as to finish before the ground dries. Then, by the time you've harvested the crop, the price has usually dropped. You have to sell right away, though, for if you don't, the onions will dry out so much you'll lose more in weight than you gain in price."

Coffee and cotton, the principal crops now grown in the State of São Paulo, were also once grown in this community. No cotton, however, is at present in production and only a few coffee trees are left. In 1905, 3,220 *arrobas* (52 tons) of coffee were reported produced in the community; and in 1933, 1,360 *arrobas* (24 tons). In 1924, cotton production was given as 6,200 *arrobas* (396.8 bales) and reported to be at that time "expanding rapidly;" in 1933, however, only 90 *arrobas* (5.8 bales) were reported produced. A severe freeze some years ago is said to have destroyed most of the coffee trees. A local farmer who once had 8,000 trees said, "These hills aren't good for coffee; it gets too cold in the winter." It is also likely that soil exhaustion from extensive cropping contributed to the decline of this crop. The disappearance of cotton cultivation seems to have been due to a combination of circumstances, including unfavorable weather for cotton growing, low prices, and a severe attack by a cotton pest, the *curuquerê*, all of which occurred in the same

year. "There used to be a lot of cotton grown around here," said a farmer, "but after that year when all of us lost the whole crop, we stopped planting it. No one even wants to hear cotton mentioned any more."

The shift from agriculture to cattle raising and dairying which has proceeded rather rapidly in recent years in certain other areas of the State of São Paulo, especially in the so-called "Norte"¹³⁶ region, is just beginning in this community. (See p. 77.)

The principal labor used in planting and cultivating is human labor. Most farms are quite small and the work usually is done by the farmer and his family, although some help may be hired, especially to prepare new land or at harvest time. On occasion, men, women, and children all work in the fields; the major portion of the labor, however, as has been indicated, is performed by men. Work is rarely done on Sunday. Quite often Saturday afternoon is also reserved for going to the village to make needed purchases, although, when the farmer is especially busy, at planting and harvest time, this may be postponed until Sunday.

The horse, the mule, and the burro also are used occasionally for traction, especially to pull the plow, the *riscador*, and the harrow. These implements, however, as has been indicated, are by no means as much used as the hoe. Although the first plow is said to have appeared in the community early in the present century, and most farmers now own this implement, one rarely sees the plow being used. It is said to be used most to prepare land for potatoes and maize. There are no tractors in the community. The disk, the planter, and the cultivator are unknown. Other implements used are described elsewhere.¹³⁷

Harvesting also is entirely by hand. There are no mowers, reapers, binders, pickers, diggers, huskers, or threshers powered either by animal traction or motor vehicle. Produce may be carried into the house or shed for storing, or to the village to be sold, in *jacás*, or huge baskets,¹³⁸ secured to either side of a horse, mule, or burro.

¹³⁶ Literally "the North," although the area is in fact the eastern tip of the state. It is called the Norte because the *bandeirantes* who left São Paulo for Minas Gerais traveled to this area in a generally northward direction.

¹³⁷ See Tools and Other Equipment, p. 50.

¹³⁸ See Tools and Other Equipment, p. 55.

¹³⁵ An increasing export is raw milk which is being marketed in larger quantities each year. See *Beginnings of Cattle Raising and Dairying*, p. 77.

A few farms are still almost entirely self-sufficient. On one farm of about 115 acres, for example, live a 61-year-old man, his wife, and 10 children, 2 of whom are married and have families of their own living in separate houses on the same farm: a total of 21 persons. All food consumed, including sugar (in the form of *rapadura*), is produced on the farm. "The only things we have to buy," says the grandfather and head of the family, "are salt and kerosene, a tool now and then and cloth to make our clothing." Oil for the cane press and other simple machinery is obtained from castor beans which also are grown and processed by the family. The beans were not planted, but grew naturally. The stalks, which are light gray at the base, dark brown midway up and light red and green still higher, are over 5 inches in diameter at the base and reach from 9 to 12 feet in height. The dark-green leaves are large, spreading out from 6 to 17 inches. The fruit grows on stems at right angles to the stalk, in clusters 12 to 15 inches high, containing around 40 berries each.

Although no surplus is produced for sale, all the coffee consumed by this family also is grown and prepared on the farm. A few berries ripen in March but most in April. To harvest them, an area immediately below the tree is cleared, after which the picker grasps a branch with one hand and, with the other, strips off the berries and lets them fall on this cleared space. They are then carried in baskets to a convenient spot where leaves, twigs, dirt, and other extraneous material are winnowed out by means of a large winnowing tray, made of *taquara*, after which they are taken and spread out on the *terreiro*¹³⁹ to dry thoroughly. The duration of this process varies with the weather but ordinarily takes about a month, the berries being stirred occasionally so as to dry evenly on all sides. If rain threatens, they must be taken up and spread again after the sun comes out. When dry, the berries are carried and placed in a *tulha*, or depository, for keeping in a dry state until needed, when they are carried to the *monjolo*¹⁴⁰ and the hulls cracked and broken off. The beans are winnowed and then put into a large copper basin, about 2 feet in diameter, and roasted for 15 to 20 minutes with a little sugar; meanwhile

they are stirred briskly to prevent burning. The roasted beans, which are now almost completely black, are then carried to the *pilão*¹⁴¹ and pounded into a powder, subsequent to which they are ready for use.

The coffee trees had been planted in late "spring," around November. They had been set out on "new" land, which had just been cleared of second-growth timber. The area where the trees and bushes had been heaviest was used for this purpose. Holes 1½ spans wide and an equal distance long and deep were dug with the *enxada*, 15 to 16 spans apart. Three coffee beans were then dropped in, a short distance from each other, and covered with dry leaves. Stakes about 2 spans long were cut and laid to cover partially each hole, so as to shade the new plants. When the beans had sprouted, or some 3 months later, the amount of sunlight to reach the young plants was increased by removing the stakes. They were then stuck in at the side of the plants to help support them during the first months of life. From time to time, the plants were weeded. The first crop was produced 3 years later.

Although the land surface in the region, as has been indicated, is quite irregular and soil easily washes away during a heavy rain, no attempt has been made to control erosion. Terracing and contour plowing are unknown. Although one crop occasionally is followed by a different one in the same field, there are few systematic attempts at crop rotation. Nor is any effort made to restore fertility to the soil by planting legumes or other soil-building crops, or by scattering barnyard manure upon it. As has been indicated, there are no barns. In a country where "winters" are ordinarily mild and even warm, livestock usually run in pastures during the entire year and consequently manure does not accumulate. Commercial fertilizer occasionally is used, but the cost is prohibitive for most farmers in the community. Of the 17 farms visited, on only 2 were commercial fertilizers being used, in quite limited quantities. If the farmer has sufficient land, he may let a field *descançar* (rest) 3 or 4 years.¹⁴²

¹⁴¹ See Dwellings and Furnishings, p. 45.

¹⁴² All the fields on one farm observed had been in continual production for over 60 years. Crops to some extent had been rotated.

¹³⁹ See Hygiene and Body Habits, p. 30.

¹⁴⁰ See Tools and Other Equipment, p. 51.

During the past 6 years, a Government agronomist has been stationed at Boa Vista to assist farmers in the region of which the community under study is a part. "He's a good friend of ours," said a villager, "because he knows farmers here are hard workers." The actual acceptance into the community of any new farming technique as a result of the agronomist's recommendation is, however, doubtful. Present techniques all seem to be traditional, handed on from fathers and grandfathers. Farmers tend to be convinced that they themselves are better informed on such matters than is the agronomist, an attitude reflected in the somewhat extreme remark of a young farmer: "Those fellows know only about books; they haven't any practical experience. When you show them an onion and you say, 'Look, see how fine the beans are!', they say, 'Yes, aren't the beans fine!' You take them to see your manioc and they want to know why it isn't bearing fruit. They don't even know the tubers grow under the ground." The agronomist tends to be looked upon, not as a useful instructor on improved techniques of farming, but as a link with a paternalistic government which may supply the more pressing of the farmers' needs. "The agronomist came here once a long time ago," said a villager, "but he didn't come back because he didn't have the support of his bosses, and he can't do it alone. It's like telling a sick man what he should take without giving him any medicine. The agronomist knew what needed to be done but he had no money and he couldn't get any from the government." "To my way of thinking," remarked a farmer, "it should be like this: In each *município* there should be an agronomist who knows farming well. When a farmer sends in a request for something like seeds, fertilizer, insecticides, or credit, the agronomist should go to the farm and see if the farmer really needs what he's asking for, and if he should have as much as he asks. If the agronomist agrees with the farmer, the government should then furnish him what is needed. That's the way it should be."

With the assistance of village officials, the agronomist, on instructions from a politician in São Paulo, recently arranged a meeting on a Sunday with local farmers "to discuss matters of general interest to all." At the appointed time, there were 52 farmers present, all of whom were from

small farms averaging around 24 acres. A questionnaire was presented, to be filled out by each man present. Illiterate farmers were assisted by friends who could read and write. All showed interest in this new experience but doubts were general regarding the positive results to come from it. There was much laughing and looking askance at the agronomist. The questionnaire called for a choice as to which item in each of two sets the farmer considered himself in greatest need: (1) Tools, fertilizer, seed, insecticide, transport, or medicines for livestock; (2) credit, price guarantees, lower interest rates, or farm laborers. When the questionnaires were turned in, all but three of the replies were to the effect that all items on both lists were needed. After considerable insistence on the part of the agronomist, however, the farmers selected only one item from each list, the principal ones checked being, price guarantees, seeds and insecticides, in that order.

SÍTIOS AND FAZENDAS

All but four farms in the community are known locally as *sítios*; the four farms are called *fazendas*. The distinction seems to lie in the fact, first of all, that the *fazendas* are much larger; all of the *sítios* are relatively small holdings. More importantly, however, each *sítio* is worked by the owner (or renter) and his family, while the *fazendas* are worked by hired help who ordinarily live on the property, together with their families, if married.

Of the four *fazendas*, one belongs to the State government. Two others are owned by absentee landlords, each of whom lives in São Paulo and delegates the care of his property to an *administrador* who oversees the work on the *fazenda* and arranges contracts with men and their families to live and work upon it. In the fourth case, the owner himself resides on the property and oversees it.

The *fazenda* which belongs to the State government is the largest of the four. It comprises 620 *alqueires*, or about 3,701 acres. Although cattle are raised on it and a small portion is under cultivation, it is used principally as a place to care for horses employed at the government station where antitoxin for snake bite is prepared. It has a resident administrator. There are 24 hired hands, all of whom, together with their families, live on the

fazenda in individual houses. The men work by the day and are paid from 20 to 25 *cruzeiros*. In addition, 10 other families live on the *fazenda*, each of whom is allotted 2 *alqueires* (12 acres) to be worked at a rental of a third of the production. The administrator lists the present number of livestock as 82 horses, 500 cattle, 20 mules and burros, 47 hogs, and 20 sheep. Under cultivation are 120 acres of maize and about 3 acres each of sweet-potatoes, manioc, and bananas. There is an elementary school of three grades, with 42 pupils matriculated, all of whom live on the *fazenda*.

The owner of the second *fazenda* lives in São Paulo and his administrator is engaged at present in turning the land into pasture. The property comprises 136 *alqueires*, or 816 acres. On the *fazenda*, in the largest house on the property, live the administrator and his wife and seven children, aged from 1 to 15 years. Two *camaradas*, or hired hands, have living quarters nearby. In 12 other houses scattered over the *fazenda*, reside 66 other persons, including 24 adults and 42 children. Each of these families tends a small plot of land, ranging in size from 1½ acres to 24 acres. Work contracts vary. Two families pay a third of their crop as rent and two families pay a fourth. The families that pay a third receive seed and have their land plowed at the expense of the owner; the families that pay a fourth, receive no assistance of this sort. Five other families pay a cash rental yearly of 400 *cruzeiros* per *alqueire*, or about \$3.68 per acre. Two families are furnished houses and the use of 1½ and 4½ acres of land, respectively, for 2 years without charge as a return for helping clear the land of timber and underbrush in preparation for seeding it to pasture. The mother of one of the hired hands is given food and a house to live in for working occasionally for the owner. All contracts are verbal.

The third *fazenda* lies at the edge of the village, the *sede*, or headquarters, with the principal farm buildings, being located about 200 yards back of the village church. The *fazenda* comprises 360 *alqueires*, or 2,162 acres. The owner lives in São Paulo and the *fazenda* is in charge of a resident administrator. The latter lives with his wife and two small sons in a large farmhouse at the *sede*. Nearby live two men who assist with the work of the *fazenda*, together with their families. There are 16 other houses scattered over the farm, in

which live 34 adults and 15 children. On the *fazenda* reside, therefore, 64 persons, or 40 adults and 24 children. Native timber is being cut off and trucked to the nearest point on the railroad or to a nearby town and sold for firewood, and the land thus cleared is being turned into pasture. Approximately 240 acres have been cleared, and about twice that acreage still remains uncut. Most of the men living on the *fazenda* are engaged in this work. Three families are renters, each of whom pays a third of his crop for a house and a small plot of land. At present, there are 45 head of cattle on the *fazenda*. Forty-six acres are in cultivation, the largest acreage being in maize.

The fourth property is, in fact, only in process of being built up into a *fazenda*. At present, it is composed of four separate pieces of land, each located at some distance from the others. The *sede*, with its farmhouse and other principal buildings, is on the largest of these plots of land, comprising 371 acres, one parcel of which is owned by the farmer's wife. It is located at the side of the road that runs from the village to Boa Vista. The owner lives here with his family, which is composed of 10 adults and 3 children. In addition, four unmarried men live near the farmhouse, each of whom works by the month for 650 *cruzeiros* and is furnished a house and a small plot of land to till. Aside from these small plots, and a 6-acre patch of cane, all the land on this part of the property is given over to pasture. There are approximately a hundred head of cattle, a few of which are milk cows.

The second portion of the property lies about 3 miles away and contains 321 acres. Scattered over it are six houses in which live 24 adults and 10 children. Five of the six families each tills a plot of land for a rental of a third of production. In the sixth house, which is an enormous *casa grande*,¹⁴³ live a man, his wife, five children, and a hired hand. Besides tending 15 acres of land, this man, as cane is available, runs an *engenho* for making *pinga*,¹⁴⁴ under contract with a man in São Paulo who, in turn, has a contract with the owner of the property to use the *engenho* for 5 years. On this part of the *fazenda* are 237 acres of pasture, with 190 head of cattle. Eighty-four

¹⁴³ See Dwellings and Furnishings, p. 42; also plate 6, d.

¹⁴⁴ See Distillation of Pinga, p. 89.

acres are under cultivation, half of which is in maize.

The third portion of the property is nearby and consists of 240 acres on which live, in one house, a family consisting of three adults and a child and, in a second house, an unmarried man. This land is worked for a rental of half the production. Twenty-four acres are in maize, 9 acres are in beans, $3\frac{3}{4}$ acres in rice, 3 acres in onions, and $1\frac{1}{2}$ acres in potatoes. All production is consumed on the *fazenda*, with the exception of part of the onions and potatoes. Seventy head of cattle are being pastured. The fourth portion of the property is located on the other side of the village; it comprises 59 acres and is in pasture.

The entire property is thus composed of 166 *alqueires*, or approximately 991 acres. On the four parts, live 9 families consisting of 42 adults and 14 children. There are 360 head of cattle being pastured on 759 acres of land. Of the 89 acres in cultivation, 66 are in maize.

The size and relative frequency of *sítios* are described in the section on Wealth and Property, page 95.

PLANTING, CULTIVATING, AND HARVESTING

As has been indicated, maize is the principal crop. It is planted anytime from early in September to the middle of December. After accumulated grass, weeds, and small brush have been burned off, a patch of land may be plowed; or the corn may be planted directly after the burning. A small opening about 4 inches deep is made with the hoe or *cavadeira*¹⁴⁵ and five to six grains of maize are dropped in and covered with the foot. Preferably, this is done when the moon is waning. In old land, hills usually are a little over 4 feet apart; in new land, only about 3 feet. The plants are weeded twice, about a month after planting and again when needed. The hoe is used for this purpose and, at the first weeding, a little dirt is pulled up around the plants. When ready for harvest, the ears are snapped and piled unhusked on the ground; later they may be carried on the back of a mule or burro to the *paiol* for storage. If the maize is to be sold, it may be husked by hand and shelled in a hand sheller.

Potatoes are increasingly grown. Care is taken to clear the land well before planting. If the plow is used, the land is gone over twice and, if it is new ground, all stumps and brush are carefully cleared out. Furrows are then made with the *riscador* 3 spans apart, and an entire potato, which ordinarily is quite small, not more than $1\frac{1}{4}$ inches in diameter, is dropped by hand every $1\frac{1}{2}$ spans and covered with dirt 1 span deep by another person who follows with a hoe. Three plantings may be made each year: in February or March, in May or June, and in August or September; in each case, before the new moon appears. One weeding, 4 to 6 weeks later, is considered sufficient, at which time dirt is pulled up around the young plants. About $3\frac{1}{2}$ months after planting, the new potatoes are dug with the hoe and sacked in the field, subsequent to which they are carried and piled in a nearby *rancho*, if available, or taken to the house.

To plant beans, openings about a span apart and 2 inches deep are made with the hoe and three to four beans are dropped into each hill. Two plantings are made each year, one in the "dry season," in September or October, and one in the "rainy season," in February or March. This is done when the moon is waxing. One weeding, 15 to 20 days after the new plants appear, is considered sufficient, the hoe again being used for this purpose. The crop is harvested approximately 3 months after planting. Each plant is pulled up by the roots and carried to the house or to a *rancho*, if available, where they are laid in the sun until the pods are quite dry, which usually takes about 3 to 4 days, after which they are piled up and beaten with long sticks until all the beans are separated from the pods (pl. 11, c). The latter are then removed with a rake and the beans piled with a broom. With the *peneira*, they are winnowed of chaff and other extraneous matter, including dirt, and sacked.

All rice grown in the area is of the upland variety. It is planted in low places where maximum moisture is to be found. The land is first well cleared and worked over with the *enxada*. Openings about a span apart and 3 inches deep are then made with the hoe, and the amount of rice which three fingers put into a sack can withdraw is dropped into each opening. Planting is preferably in September or October. Beginning about

¹⁴⁵ See Tools and other Equipment, p. 50.

a month later, the new plants are weeded three to four times at intervals of about 3 to 4 weeks. The harvest is in April or May. When dry, the stalks are cut with a sickle and dropped on a large cloth so as to conserve the grains which shatter. The cloth is then tied up and carried on the harvester's back, or, if too heavy, in a *carroça*, to the house. The stalks are then bound into small bundles and beaten over a board, after which the grain is winnowed with the *peneira*. If sold, the rice is marketed unhulled; if used at home, it may be hulled in a *pilão* or taken for this purpose to Boa Vista.

Onions are increasingly grown as a money crop. In April or May, 3 days before the new moon, the seeds are planted thickly in beds. Transplanting ordinarily is done in June, July, or August, depending on the weather, since rain and the consequent wet ground is to be taken advantage of and this is the "dry" season. Holes about 3 inches deep and a span apart are made with the side of the hoe and a plant set out in each hole. Rows are $1\frac{1}{2}$ spans apart. The dirt dug from the subsequent hole is used to cover the preceding plant. There are three weedings during the growing season, the first about 2 weeks after transplanting, the second around a month later, and the third about a month after that. Harvesting is in October, November, or December. The plants are pulled up by hand and carried either on the farmer's back or on a mule or burro to the *ranch*o, or the house, depending on the conveniences of the farm. The new onions may have to be piled in one of the rooms of the house. They are then braided into long *resteads* for more convenient transport. This is done by taking three equal stems of the cattail plant, and braiding them, inserting the top of an onion each time a stem is crossed over another. When finished, double rows of onions are fastened loosely but firmly together (pl. 11, h).

So far as the quantity of total production is concerned, the foregoing crops are the principal ones grown in the community. Farmers, however, often have a small patch of sugarcane and, occasionally, of sweetpotatoes, peanuts, tobacco, or manioc.

Cane is planted "anywhere." "Land that will not do for any other crop is good for cane," remarked a farmer. The kinds grown in the community are known locally as *java*, *taguara*, *rôsa*, *caninha*, and *cristal*. The *java* is preferred for

making *pinga*. A field is cleared with the ax or *foice*, and the refuse burnt. Some farmers then go over the field with the *gráde*, or crude harrow. Trenches $1\frac{1}{2}$ spans deep, 2 spans wide and 3 spans long are dug with the *enxadão* every 3 feet, into which a cane *muda*, or cutting, is dropped, and a little dirt pulled over it with the hoe, enough to cover the cutting but not enough to fill up the trench. Planting is done at either of two periods in the year, in September or October and in January or February, in each case when the moon is waning. "Three days before the new moon," said a farmer, "is just right." The plants are weeded three times during the growing season, the first time about 6 weeks after planting; the second, a month later and the third, a month after that. The harvest is ordinarily 2 years after planting, although some farmers make the first cutting within a year and a half. Still other farmers wait 3 years. With a *facão* or *podãozinho*, stalks are lopped off even with the ground, trimmed of leaves and dropped into piles, after which they are carried, or hauled in *carroças*, or, if the yield is large enough, in trucks.

As has been indicated, most farmers have at least a small hand press for crushing cane to make *garapa* or *rapadura* for their own use. An occasional farmer has a press which can be turned by animal power. There is only one large mill turned by water power in the community, and it is used to make *pinga*.¹⁴⁶

Sweetpotatoes also are planted "any place." The land is burnt over and long furrows $1\frac{1}{2}$ spans apart are made with a *riscador* or, more commonly, with a hoe. Planting is done in September, October, or November, in each case when the moon is waning. A piece of vine, about a span long, taken from a previous planting, is dropped in every $1\frac{1}{2}$ spans. The plants are weeded twice, once shortly after planting and the second time a month later, when dirt is also pulled up around the hills. The new sweetpotatoes may be dug about 3 months after planting, although they are sometimes left in the ground an additional 3 months. Digging is with the *enxadão*, following which the sweetpotatoes are piled and carried away on the back of a burro or mule.

To plant peanuts, local farmers select their most fertile land. Planting is done in September,

¹⁴⁶ See Distillation of Pinga, p. 89.

October, or November, in each case when the moon is waning. A hole is made with the *enxadão*, about 6 inches deep and 10 inches square and three peanuts are planted to a hill. The plants are weeded three times, once shortly after planting, again 6 weeks after planting, and a third time about 2 months after that. At the last weeding, dirt is pulled up around the plants so that only the upper parts are left in view. The new peanuts are harvested about 6 months after planting, the vines being pulled up by hand and left to dry in the sun, after which they are carried to the house or *rancho* in baskets.

To plant tobacco, local farmers also select their best land. A seedbed is prepared early in September, in ground heavily fertilized. Ashes are sprinkled over the bed and left for 15 to 20 days before the seeds are planted. Transplanting occurs in the "time of the rains," usually in December, and early in the new moon. Plants are taken out of the seedbed and set in holes a half span deep and a span apart. Three feet are left between the rows. There are three weedings, a month or so after planting, a month or two later, and just before harvest. At the second weeding, dirt is pulled up around the plants and withered leaves are broken off. In March or April, when the leaves turn yellow, they are stripped off the stalks by hand and carried in baskets to a depository where they are stood up on their stems. The next day, they are hung on an *estaleiro*,¹⁴⁷ two leaves to a side, one on top of the other, and left to dry, which usually takes 10 to 12 days. The leaves are then braided tightly into rolls which are turned twice a day for about 40 days and once a day thereafter until they have dried for some 3 months. All tobacco grown is ordinarily used in the community.

Manioc requires 2 years to produce a crop. It is planted on high, dry land and in the best soil the farmer has. At the beginning of "winter," or about the first of June, the stalks of the previous crop are cut off close to the ground and piled to use for cuttings to seed the new crop. After the land to be planted has been burnt off, trenches are dug with the hoe about 10 inches deep and 10 inches square and 3 spans apart, into each of which

is dropped a cutting containing three buds. About 4 spans are left between rows. Planting is done any time from August to October, in any phase of the moon. The new plants are weeded six times, once every 3 months. Manioc is said to be harvested "in those months which do not have 'r'"; that is, in May (*maio*), June (*junho*), July (*julho*), and August (*agosto*). If the ground is moist, the tubers are pulled up by hand; if the ground is dry and hard, the *enxadão* is used. They may also be left in the ground, since manioc keeps indefinitely in any soil.

Almost every farm has at least a few stalks of bananas. They are ordinarily planted on old land. With the *enxadão* and the shovel, holes are dug 3 spans square and about 8 feet apart. A shoot with attached roots from a neighbor's banana grove is then set into each hole and the roots covered with dirt. Approximately every 2 months, the weeds are cut away from the new plants and after the first yield, which comes about 1½ to 2 years after planting, a little dirt is pulled up around them. As soon as a bunch of bananas ripens, the stalk is cut off near the ground with a *foice* or a *facão* and the bunch of bananas detached (pl. 11, f). A new stalk soon appears from the stump and will produce another bunch of bananas in about a year.

Although, as has been indicated, groves of oranges are rare in the community, approximately half the farmers have at least one or more orange trees. For planting, young trees are first grown from seeds in a seedbed and when they have reached about a span in height, they are transplanted, preferably in *massapé* soil. They are set out in holes made with a hoe about 3 spans deep and 25 spans apart. Planting occurs anytime in the "time of the rains." The new plants are weeded two to three times a year. If they have been grafted, fruit will be produced in from 1 to 2 years; if not, in from 7 to 8 years. Harvesting may be any time from April to September. A ladder is used for picking.

GARDENS AND ORCHARDS

Gardens ordinarily are small and have few varieties of vegetables. On the 17 farms visited during the growing season, the 2 gardens which were most adequately producing food for the family contained, respectively, about 35 tomato, 80

¹⁴⁷ The *estaleiro* is made by fastening a number of bamboo or other poles, each about 6 to 7 feet long, horizontally to two vertical poles of somewhat lesser length.

pepper, 50 lettuce, and 6 *couve* plants; about 500 lettuce, 60 *couve*, and 200 cabbage plants. On two farms, there were no gardens. On another farm, the only plants in the garden were three cucumber vines and, on still another farm, there were only four *xuxu* vines.

On only two farms was garden produce being grown for sale; on one of these, there were about 2,000 pepper plants and a small patch (about $\frac{1}{20}$ of an acre) of cabbage; on the other, 3 *tarefas* (about half an acre) of squash.

In the village, 9 of the 73 families have gardens back of their houses. In one of these, there are small quantities of lettuce, chicory, radishes, water cress, and sugarcane, the latter taking up the major portion of the ground cultivated. In another garden there are a few plants each of lettuce, carrots, and beets. A third family has a small patch of maize. Another family has about 25 hills of beans. A fifth family has about 30 hills of onions, 10 plants of *couve*, 5 of peppers, and 2 of wild celery, a pumpkin vine, and a *xuxu* vine. Another family has a few lettuce and *couve* plants. A neighbor has a *xuxu* vine and a few parsley plants. Another neighbor has a small patch of maize and six lettuce and eight cabbage plants. The ninth family has a few plants each of carrots, peas, cabbage, tomatoes, peppers, and cucumbers. A few other families have small gardens on pieces of land which they own or rent for farming purposes outside the village.

One reason why vegetables and other garden truck are not more extensively grown is the presence of the *saúva* ant, which in a single night may cut off the plants of an entire garden. "I like greens very much," said a farm woman, "especially *couve*. I used to plant a good-sized garden—enough for my family and to give away to others. But the last 2 years, the ants have cut down everything."

Of the 17 farms, the farm on which the greatest variety of fruit was growing had the following kinds:

Kind of fruit:	Number of trees
Orange-----	15
Pineapple-----	12
Peach-----	12
Jaboticába ¹⁴⁸ -----	9
Banana-----	6

¹⁴⁸ See Wild Fruits, p. 34.

Kind of fruit—Continued	Number of trees
Mango-----	5
Papaya-----	5
Pear-----	4
Lima ¹⁴⁹ -----	4
Fig-----	3
Grape-----	3
Caqui ¹⁵⁰ -----	2
Apple-----	2
Lime (<i>limão galego</i>)-----	2
Araticum ¹⁵¹ -----	1
Total-----	85

All fruit grown on this farm is consumed by the occupants, a father, mother, and their 10 children, all of whom are grown and 2 of whom are married and live with their families in separate houses on the same farm. None of the fruit is sold.

On each of the other 16 farms, the number of different kinds of fruit being grown were, respectively: 11, 9, 8 (two farms), 5 (two farms), 4 (four farms), 3 (two farms), 2 (two farms), 1, 0; or an average of 5.2 kinds of fruit per farm.

The farm with the largest number of fruit trees had 283, distributed in the following way: bananas 200, oranges 30, peaches 14, mangoes 13, *jaboticábas* 12, avocados 5, *caquis* 5, limes 2, *limas* 2. One farm had no fruit. On the other 15 farms, the principal fruit being grown was bananas, only 2 farms being without this fruit. The number of stalks on each farm were, respectively, 200, 80, 70, 40, 35, 30 (on two farms), 20 (on three farms), 8, 6, and 3. One farm had no fruit except bananas.

Nineteen different kinds of fruit were growing on the 17 farms. In the order of their frequency they were: bananas, on 14 farms; oranges, on 11 farms; *jaboticábas*, on 8 farms; *limas*, peaches, and limes, on 7 farms each; mangoes, on 6 farms; pears and apples, on 4 farms each; *caquis*, grapes, and pineapples, on 3 farms each; papayas, figs, and avocados, on 2 farms each; quince, citrons, guavas, and *araticuns*, on 1 farm each.

The total number of each kind of fruit tree (or plant) on all 17 farms was: *araticuns* 1, guavas 2, quince 5, figs 6, avocados 6, *caquis* 9, papayas 10,

¹⁴⁹ *Citrus medica*; not the lime.

¹⁵⁰ A species of persimmon, originally imported, it is said, from Japan. The fruit in Brazil sometimes reaches 3 inches in diameter.

¹⁵¹ See Wild Fruits, p. 34.

lîmas and limes 17 each, pears 18, grapes 24, citrons 50, mangoes 59, *jaboticábas* 87, pineapples 112, oranges 215, bananas 568;¹⁵² or a total of 1,252 fruit-bearing plants on the 17 farms.

Of the bananas, seven species are grown, called locally: *naníca*, *prata*, *maçã*, *São Tomé*, *da terra*, *roxa*, and *de caroço*. The *naníca*, a small, rather sweet banana, is the principal kind grown in the State of São Paulo, and the *prata*, a somewhat larger and less sweet banana, is the next most common. The *maçã* (apple) is so named for its faint resemblance in taste to the apple. *Da terra* is plantain and is always cooked before being eaten. The other three kinds are grown only occasionally: the *São Tomé* is a short, thick banana; the *roxa* (purple) is a species of "red" banana; the *de caroço* (pit, or seed) has many seeds and some persons do not care for it.

On only one of the 17 farms was fruit being grown for sale. At the time it was visited, a field of pineapples, with an estimated 1,200 plants was in cultivation and there were an estimated 300 banana plants.

There are three farms in the community which were not included in this sample and which sell fruit to other families. On one of these farms, there are oranges, bananas, papayas, peaches, *caquís*, and grapes; only bananas, however, are grown in quantities sufficient for other than home consumption. On another farm, are grown oranges, tangerines, pears, quince, avocados, *jaboticábas*, *caquís*, and grapes; only oranges and tangerines, however, are produced in quantities sufficient for sale. From the third farm, bananas, oranges, and pineapples are sometimes sold. One of the three farmers himself does the grafting of trees on his farm.

Only a few families in the village have fruit trees. At the back of one house, for instance, is an orange tree and a mango tree. Another family has an orange tree, a tangerine tree, and six papaya trees. A third family has an orange tree and two grapevines. Another family has only a tangerine tree. Nowhere in the community is fruit sprayed. As has been indicated, no canning is done.

¹⁵² Since, in 10 of the 14 instances involved, this figure is composed of "round numbers," 3 of which are relatively large and since a tendency to overestimate actual numbers was noted, it is probable that this figure is somewhat larger than the actual number of banana plants.

THE MUTIRÃO

The *mutirão* was once an important institution in this area. Several neighboring farmers would get together to help one of their number with some activity, such as the planting, hoeing, or harvesting of a field, or the building of a house or other shelter. Often while working, the men sang. Meanwhile, the wives, mothers, and sisters would gather at the house to help prepare the food. After the day's work was over, there would be feasting. Then "someone would bring out a *violão* and play it in the *terreiro*," recalls a farmer's wife, "or maybe there would be a *samba*." The term *demão* (aid, help) occasionally is also employed in referring to this institution.

Today, the *mutirão* has virtually disappeared. It is said to be 20 years since the last gathering of this sort occurred in or about the village. For one thing, fields are smaller than they used to be. Inheritance is splitting up the land into constantly decreasing holdings. (See *Wealth and Property*, p. 97.) The diversification of crops has further reduced individual plantings. Increasing population under the condition of a static land supply is also beginning to diversify employment. Several heads of families do not own land, and consequently cannot get a return for the labor they might put into a *mutirão* on another man's farm. The invasion of a money economy has also worked against an institution which was based upon an exchange of services. The decrease in the food supply of the region, in proportion to the population, and the consequent increase in prices, coupled with the extensive inflation of recent years in Brazil, has made the *mutirão* uneconomical, the cost of the feasting which one would like to furnish his neighbors being virtually prohibitive under the present limited income of most local farmers. It would also seem that the economic return from the *mutirão* which a farmer might be expected to receive has declined by reason of a decrease in the quantity and quality of workmanship.

Seventeen men whose farms were visited and who replied to the question, "Why do you no longer 'have *mutirão*'?" gave the following replies:

I plant very little.

My fields are small.

I do not farm very much and the family can handle it.

I can do all my work myself.

I plant little; when I need help, I can always hire someone.

I used to "have *mutirão*" when I planted more; but my fields are now too small.

My men do all the work on this *fazenda*; we don't need anyone else.

In the olden time, a man seldom had more than one principal crop. Today, there is a little patch of onions here, a piece of corn there, a few stalks of rice in another place, and a patch of beans somewhere else.

It costs too much to feed the men.

One has to kill a fat pig and get a lot of other things for the men to eat and in these days that costs a lot of money.

There used to be lots of men but today there are not enough who are willing to exchange work with you.

Exchanging work is more difficult now; some men work at the quarry, some cut wood, some work for other men and don't have farms of their own.

Today, people want to be paid; that makes it more difficult.

It is better to hire workers than to owe a debt.

They don't do a good job. One can't order someone else to work as he should, when he is just doing you a favor.

I don't want people stepping all over my crops. They drink too much. They all want to get through in a hurry and the work is not well done.

The men on my *fazenda* do all the work.

Two vestiges of the *mutirão*, however, still remain. In an isolated part of the community which lies in the bend of the river several miles from the village, two related families occasionally help each other in this way. A farmer interviewed said, "Once in a while I have in a few men. Usually to clear land for pasture. Sometimes to hoe a field of maize. I give them *almoço* and a little *pinga*. I never have anyone for harvesting; I do that myself. People used to "have *mutirão*" with singing and everything. But today, it's not like it was in the olden time." One or two women come in to help with the *almoço* which is taken to the field where the men are working. The *sambas* in the evening and "the man playing the *violão* in the *terreiro*" apparently are now events of the past.

Another vestige is the custom of *trocar dia* (exchange a day). A man will agree to work for a day or two on the farm of another man, in return for which the other man will work for him a similar length of time. Even this arrangement, however, is disappearing. "Except when something has to be done in a hurry," said a local farmer, "What do I gain by exchanging a day with another man? If I put in a day working for him to get him to work a day for me, I am no

further ahead than if I had worked both days on my own farm."

This remark would seem to emphasize the fact that the economic aspect of the *mutirão* was considerably less important than other aspects. It was probably not so much the amount of work actually accomplished that once made the *mutirão* a vigorous institution. It was rather the satisfactions to be gotten from working together with other persons in a joint undertaking under agreeable circumstances. The singing while at work and the stimulus of competition with one's friends made the actual labor light, and the subsequent feasting and music and dancing intensified sentiments of belonging and periodically renewed the collective life.

DECLINE OF AGRICULTURE

In the conversation of villagers and farmers, one hears rather frequently the phrase *abandono da lavoura* (literally, abandonment of tillage). The impression is general in the community that less farm produce is being grown now than formerly.¹⁵³

The decrease is due to a combination of circumstances. As already indicated, the population of the area, by reason of the emigration of individuals and families, has declined in recent years. Although a considerable portion of the land only recently was cleared of forest growth, the fertility of the soil of this part and, more particularly, of that which has been tilled for decades, in all probability has decreased considerably as a result of erosion and cropping, especially since the use of commercial fertilizer is rare and that of barnyard manure unknown. Some land is being taken out of cultivation and put into grassland for grazing purposes, the total acreage of which is still small but growing.

A perhaps more important circumstance leading to the decline of agricultural production, however, is the unrest among farmers due especially to the difficulties experienced in dealing with the price and distribution system of the expanding market of the city, under war and postwar conditions.

¹⁵³ Unfortunately, statistical data either to support or to deny this general impression are unavailable, but there would seem to be no reason to doubt it.

"I used to take my stuff to São Paulo and sell it in the Pinheiros²⁵⁴ market," said another farmer. "They charged a *cruzeiro* commission for each *arroba* of onions, or sack of beans or maize or potatoes. They would take what we had brought, give us a receipt for it and when it was sold, you could go and get your money. But the business is done differently now. When you take your produce in, a man buys it and still takes out a commission. Then he sells it to someone else for a nice profit. Those fellows just make their meals off us." "I used to try to sell my produce in Pinheiros," said another farmer, "but I learned my lesson. One day I refused to sell onions here on the farm when I was offered $7\frac{1}{2}$ *cruzeiros* an *arroba*, and took them instead to Pinheiros. When I got there, the best price any one would offer me was 4 *cruzeiros*. I told the driver of the truck to go down to the street where most of the wholesale houses are, but he wouldn't drive on until I had paid him more money. Finally, I sold the onions for $6\frac{1}{2}$ *cruzeiros*, or just a *cruzeiro* less than I'd been offered here on the farm and I had all the expense of trucking." "We work hard," remarked another farmer, "but it's only on shares for the men who buy our produce. We plant and do all the work of raising a crop and we make no more than they do just for buying our stuff and selling it again. That's not fair. But we are helpless. The buyers have us tight in their claws. And they all stand together." "It's fair for the men who truck the crops in to earn something," remarked still another farmer, "They do us a service. But they aren't the ones who make the money. Onions are being bought here now by buyers for 20 *cruzeiros* an *arroba*, while in the city people are paying $3\frac{1}{2}$ *cruzeiros* a kilo. That means an *arroba* is bringing 52 *cruzeiros* in the city. If only there were some way to get rid of those men who stand between us and the people who eat the food we raise!"

The spread between the price the farmer in the local community actually receives and the retail price in the city is, in fact, considerable. As the recent harvest was being gathered, buyers were offering in the community, as has been indicated, 20 *cruzeiros* an *arroba*, or about $3\frac{1}{3}$ cents a pound, for onions; at the same time, onions were selling,

in stores and public markets of the city, at $3\frac{1}{2}$ *cruzeiros* a kilo, or about $8\frac{3}{4}$ cents a pound. The difference, therefore, between the price actually paid the farmer and the retail price in the city represented an appreciation of 163 percent. Similarly, potatoes were being purchased in the community at 120 to 200 *cruzeiros* for a sack of 60 kilos, depending on the size, or about $5\frac{1}{2}$ to $8\frac{1}{4}$ cents a pound; while in São Paulo they were selling in the public market for 3 to 5 *cruzeiros* a kilo, or $7\frac{1}{2}$ to $12\frac{1}{2}$ cents a pound. This represents an increase of 36 to 52 percent over the price on the farm. On the same day, maize was being purchased in the community at 45 *cruzeiros* a sack of 60 kilos, or $1\frac{7}{8}$ cents a pound; while in the public markets of the city, it was selling at from 1.30 to 1.40 *cruzeiros* a kilo, or $3\frac{1}{4}$ to $3\frac{1}{2}$ cents a pound. This represents an increase of 73 to 87 percent over the price on the farm.

Thus the cost of moving these three staple crops from the farmer to the consumer a comparatively few miles away and distributing them, was from 36 to 163 percent of the amount received by the farmer. If one also takes into consideration the price which these three staples brought in São Paulo after the harvest season had passed, the price spread is much greater. Potatoes which were sold by local farmers, as has been indicated, at from $5\frac{1}{2}$ to $8\frac{1}{4}$ cents a pound, cost the consumer in the city, later this same year, as much as 17 cents a pound. Onions which the farmer sold for $3\frac{1}{3}$ cents a pound later brought as much as 20 cents a pound in the city. And maize which sold at $1\frac{7}{8}$ cents a pound, reached 7 cents a pound in the city. Even if one takes into consideration normal shrinkage which, in the case of onions obviously is considerable, the lack of storage facilities on the farm, combined with a costly distribution system, results in a sizable variation between the price paid to the farmer and that paid by the consumer.

A young farmer who claimed that he was losing money under present prices was asked to itemize his costs. He set down the following:

Estimated cost of growing potatoes

	<i>Cruzeiros per tareja</i>
To cut the brush and small trees on the land.....	25
To trim and burn.....	25
To pull the stumps.....	100
To plow the land.....	25
To harrow the land.....	5

²⁵⁴ A suburb of São Paulo.

Estimated cost of growing potatoes—Continued

	<i>Cruzeiros per tarefa</i>
For the second plowing-----	25
For the second harrowing-----	5
To list the furrows for planting-----	5
For seed potatoes-----	120
For a sack of fertilizer (60 kilos)-----	120
To plant the potatoes-----	25
To hoe and pull dirt up around the young plants-----	25
To dig and sack 8 sacks of potatoes (normal yield)----	50
Total -----	555

The farmer then stated that eight sacks of potatoes at the current price of 60 to 70 *cruzeiros* per sack would bring a return of from 480 to 560 *cruzeiros* per *tarefa*, or a loss of 75 *cruzeiros* to a gain of 5 *cruzeiros* on the undertaking.

In evaluating these data, it should be borne in mind that the farmer has listed 150 *cruzeiros* for clearing and burning, a cost not necessary on land already in production. In addition, he has charged for his own work, as well as for fertilizer which, as has been indicated, is rarely used. On the other hand, one should also allow for the fact that the vicissitudes of the weather, the maleficent action of pests, and the fluctuations of the market may cut both yield and price.

The vicissitudes of the weather, which obviously constitute an ever-present hazard in agricultural operations the world over, add to the farmer's perplexities and sense of frustration although, if he were not troubled by other problems, he probably would accept without grumbling these difficulties of a natural order, as an anticipated part of his occupational hazard.

"In 1940," said a middle-aged man, "farming cost me 15,000 *milreis* (\$825) and from that time on, I began to lose my taste for it! That year I had planted onions, cotton, and potatoes. Something happened to the onions; I don't know what it was. The tops grew to be about 30 cm. (12 inches) high and then they fell over and the onions split open and I lost them all. Worms ate up the cotton plants, and just when my potatoes were growing nicely, there came a terrific hailstorm and I lost the whole crop, as well as the money I'd paid out for seed." "Farming is fine and I like it a lot," said a farm boy 15 years old, "but lately things haven't gone so well. After the onions were planted, it rained a lot. They grew too fast and now they're mostly tops. The poor farmer is

going to get left. He's been thinking he'd have a nice crop and while it was growing he has been eating on credit and now he won't be able to pay what he owes."

In the midst of these problems and frustrations, the farmer feels ill-treated, especially in comparison with labor in the cities, news of whose recent gains is beginning to reach the community. A constant complaint heard among farmers is *não temos garantia* (we have no guarantee). "The government helps the worker in the factory," complained a farmer, "but the farmer is completely forgotten. If the factory worker gets sick or breaks a leg, he has protection and everything. But the farmer has nothing like this." "The farmer doesn't have a single guarantee," said a farm boy, 17 years old. "Everyone takes advantage of him." "This year the buyers are paying 5 *cruzeiros* for a sack of cabbage," complained another farm boy. "Why, it costs nearly that much to buy the sack itself! It's the farmer who takes all the losses. If some guarantee isn't given him pretty soon, you will see more and more people leaving the farm." "Everything is different from what it used to be," said a villager. "The farmers feel they are without protection. The government should get rid of those *tubarões*¹⁵⁵ there in the city, all that long line of intermediaries."

As the shift to cattle raising increases, farmers who plant complain of competition with the men who raise cattle. "Another thing that is bad for farming," remarked a farmer, "is cattle raising. You have to fence your land or the cattle will get into the fields. But with the prices of wire and fence posts what they are, you can't afford to do it. Cattle raising is going to put the man who plants out of business." "The law requires a man who has cattle to fence his pasture," complained another farmer, "but he usually manages to get the farmer to pay half the expenses. The man with cattle is also required by law to pay damages when the stock get through the fence and destroy a farmer's crop. But he may get a friend to appraise the damage, and anyway, no one knows what to charge for a crop that hasn't been grown yet, so the farmer usually gets the worst of the deal. I have noticed that shortly after the man with cattle comes, the farmer leaves." "The men who raise cattle close off large pieces of land," said

¹⁵⁵ Literally sharks; slang expression for "profiteers."

a farm boy, "and since they have no need of keeping up the roads through their property, it's more difficult for us to get our produce out to market."

These frustrations are leading many farmers to restrict the acreage they plant. As one visits about the community, he increasingly hears either the threat to plant *só para o gasto* (only for home use) or the affirmation that such a policy is now actually being carried out. At the same time, the restlessness produced by these perplexities and frustrations is leading some of the farmers, and more particularly their sons, seriously to think of abandoning, and in some cases actually to abandon, farming as an occupation.

Unrest appears first and most intensely among the young men, some of whom have learned of the advantages of life in the outer world through being called up for military service. "I've been staying on here only because of my father," said a young unmarried farmer. "When I was in the army, I learned how to drive a truck and I could earn my living much easier somewhere else. But I don't want to leave my father alone." Similar dissatisfactions are clear in the following remarks of other young men:

A young farmer, 23 years old, married:

No one gets less for what he does than the farmer. He works hard all day long under a blistering sun, chopping weeds in hard dirt, and then he gets little for it in the end. You never know how a crop will turn out. Sometimes the weather helps but often it hinders. And the worst is that when you do raise a crop, you can't get anything for it. When it's growing, prices are good, but by the time it's ripe, the price has dropped. If the price stays up, it's because the crops aren't any good. For nearly a year now I've been thinking about some other way of making a living. I'll do any kind of work that will pay more. I'm used to farming, though, that's what I know best. I like this place and I wouldn't think of leaving it if I could make a living here. Really, I just don't know what to do.

A farm boy, 19 years old:

The farmer works the year around, planting, hoeing, harvesting, and he makes very little. The price of everything he has to buy is high and that of everything he has to sell is low. But he has to sell in order to pay what he owes for food the family has already eaten and for tools he has had to buy. Sometimes, he can't put in as large a crop as he would like because the storekeeper will not give him more credit.¹⁵⁶ And the storekeeper is right because if the crop fails, the farmer can't pay and the storekeeper can't afford to cut his own throat. Some-

times the farmer doesn't even have enough money to buy good seed. Or he doesn't plant a certain crop for fear the ants will destroy it and he hasn't enough money to buy the insecticide and a pump to put it on. Another thing that makes farming difficult are the poor roads. A farmer hears that the price of some crop is good and he hurries to get a load off to market. By the time he can arrange a truck and get it loaded, it begins to rain, and there you are! Every year in April, the men get together to fix the roads; but after two or three good rains, they are as bad as ever.

A farm boy, 17 years old:

The life of a farmer is more difficult than any other life. He works 10 hours a day in the hot sun, while the mosquitoes suck his blood. Sometimes he sweats for nothing because it doesn't rain when it should, or it rains too much. He has no guarantee of any kind. People in the city work a few hours a day and get vacations and a much easier life.

A farm boy, 17 years old:

When the price of everything goes up, the factory workers go out on strike, saying everything is high and they want more money. But the farmer can't strike when the prices of the things he sells go down. The poor farmer, who suffers so much, just goes on suffering.

A farm boy, 16 years old:

The farmer provides food for the country. But the country thinks only of the workers in the factories. They ask for a raise and they get it. They work short hours. But if the farmer wants to eat, he has to work all the time and even then he lives in poverty. They have everything nice in their houses; there is nothing lacking. And they can do whatever they like whenever they want to. The only thing the Government seems to do for the farmer is to put higher and higher taxes on him.

A farm boy, 19 years old:

A farmer works hard until he sees he isn't making any headway. Then he gets discouraged and begins to look for some other way to feed his family. When food is high, the Government fixes the price but that's only for people in the city. And it's really the farmer who pays. Those men who buy our stuff still make a big profit, even with fixed prices. They don't lose, believe me! They just pay the farmer less and go on making money. Can you blame the farmer for leaving the farm?

A farm boy, 18 years old:

For farmers to work with any enthusiasm, they need a guarantee from the Government, something to assure them they won't suffer loss when the weather is bad; they also need credit, to furnish them what they need up until the time of harvest. The Government should fix the price of produce so that no one can buy for less than a fair price. Only in this way can the farmers go on working. As it is now, they have every reason to abandon the farm. When the time comes that there is not enough food in the city, maybe something will be done.

¹⁵⁶ See Money, Credit, and Wages, p. 97.

According to men who hire help on their farms, farm labor is less efficient than formerly. "No one today wants to work like they used to," complained a farmer. "I have a terrible time getting my work done." "These boys nowadays," remarked another farmer, "don't want to *pegá no pesado* (*grab hold of the heavy*). They think life in the field is too hard for them."

Into this situation of increasing restlessness, news of what seems to be a more advantageous life in the towns, as is clear from the foregoing remarks, is beginning to filter. Although, in this area, the attraction of the metropolis of São Paulo in the past has been quite limited, it is increasing and may soon be felt in sufficient strength to alter materially life in the community.

Beginning late in the nineteenth century and receiving its first major impetus about 1915, there has sprung up, in and about the city of São Paulo, as has been indicated, the principal manufacturing center in Latin America. This development was accompanied by a sizable increase in population, owing in part to natural increase but more particularly to immigration from Europe and to migration from rural areas, especially the interior of the State. Thus the city which in 1890 had a population of only 64,000, is now a metropolis with nearly 2,000,000 inhabitants. The need for manufactured goods which previously had been imported from Europe and whose supply had been shut off by war conditions, added impetus to this movement during World War I and again, more recently, during the second World War. The demand for labor increased markedly and wages responded to this demand, climbing higher and higher, until they came to constitute to many rural inhabitants who heard of them for the first time and who were ignorant of the increased costs of living in the city, an attractive and eventually overwhelming lure, to which they in turn responded by migrating into the city in considerable numbers. This migration appreciably reduced the number of farmers in certain rural areas, the lack of whose labor in no way was offset by the introduction of labor-saving machinery; consequently, food production has declined. At the same time, the swollen population of the city has augmented the demand for food, a demand which, due to a lack of roads, insufficient transport, and the necessary

organization, is not being adequately supplied by imports from other areas of Brazil where surpluses exist, and food prices in the city, aided by the current inflation, have risen to unprecedented levels.

Any further decline in agricultural production will make increasingly acute the food shortages already being registered in the price levels of São Paulo, especially if, at the same time, the population of the metropolitan area continues to increase. Although these shortages may not become as serious as a local resident predicted when he said, "Some day people in the city will be getting a wad of money from their employers and there won't be any food to buy with it," the problem of food in the cities is a crucial problem and at present it is increasing in intensity.

DOMESTIC ANIMALS

Domestic animals in the community include horses, burros, mules, cattle, goats, sheep, hogs, chickens, guinea fowl, dogs, cats, and songbirds. Of these, the most important are the horse, burro, and dog, although the cow is growing in importance yearly, as cattle raising and dairying increase. Chickens are kept by almost every family in the village and on the surrounding farms. The principal kinds raised are called locally *ligorne* (Leghorn), *amarela* (yellow), and *carijó* (Plymouth Rock). Oxen, sheep, turkeys, geese, and guinea fowl are relatively rare. Hogs are comparatively few since a severe epidemic of cholera a few years ago killed off virtually all hogs in the community. On the *fazenda* which lies just outside the village, there are 14 horses, 4 oxen, 2 burros, 15 milk cows, and 35 head of other cattle, 18 hogs, 2 sheep, 50 chickens, 8 geese, and 2 dogs; there are no goats, ducks, turkeys, guinea fowl, or cats. On another *fazenda*, there are 3 horses, 3 burros and mules, 24 milk cows, and 93 other head of cattle, 3 hogs, 60 chickens, 4 geese, 1 dog, and 3 cats; there are no sheep, goats, ducks, turkeys, or guinea fowl.

Of 15 *sítios* visited, 1 had 30 milk cows and 151 head of other cattle. Only two other *sítios* had any cattle: on one there were two milk cows and on the other, six milk cows. The average number of other domestic animals on each farm was: horses 1.1, burros 1.4, hogs 5, sheep 1.5, goats 2.1,

chickens 45, geese 0.4, ducks 6.3, turkeys 0.1, guinea fowl 0.3. In addition, there was an average of

3 dogs and 2 cats per farm. These data are indicated in table 10.

TABLE 10.—Number of domestic animals on 15 *sítios*, Cruz das Almas community, 1948

Sítio	Horses	Burros and mules	Milk cows	Other cattle	Hogs	Sheep	Goats	Chickens (estimate)	Geese	Ducks	Turkeys	Guineas	Dogs	Cats	Total
1	2	6			6			50					1		65
2	2	1			8		3	50					1	3	68
3	1	2			11		4	20					6	1	45
4	1				2			45		7		3	5	2	65
5	2							15		5					22
6		2			2		5	40		6			1	2	58
7	2	2					2	90		8			3	3	110
8							1	100					2	4	107
9	4	1			7			60		40			4	2	118
10		2	2		10		2	50		7			3	2	78
11								45		20			3	2	70
12	1	3	6	1	8		4	15		1	2		3	3	47
13	1						2	40					4	1	49
14	1	2	30	151	20	22	9	50	6			2	3	3	239
15	1												5	1	6
Total	18	21	33	152	75	22	32	670	6	94	2	5	44	29	1,207

The ox occasionally is still used to pull out stumps and for similar heavy work. If a farmer is without oxen, he may hire a team when needed for these purposes. The horse is used for transport, rarely for traction in the fields. Most often, he is saddled for riding, and occasionally hitched to a *charrete* or *carroça*. The burro and the mule are the principal beasts of burden. They are preferred to the horse for their ability to resist harder work over a longer period of time. The ordinary load of a packsaddle is 60 kilos to a side, or a total of about 260 pounds. At times, however, up to 400 pounds are carried by one of these animals. A burro or a mule is rarely hitched together with a horse, since "he will shirk his load and make the horse pull most of it."

In general, the ox is used for those services which require greatest strength and the horse for those which require greatest speed. The burro and the mule are considered of intermediate value with reference to both services. In this community, the ox is not used for riding, as sometimes is done elsewhere in Brazil; the horse is used principally for this purpose, as also are the burro and the mule, at least to some extent. The ox pulls only things and the horse principally persons. The burro and the mule are used in both cases. The ox is seldom used to plow, list, or harrow; the horse, burro, and mule are used for all these services, about equally for listing and harrowing, the burro and the mule more commonly for plowing.

Farmers and villagers often live in close physical, and at times social, relations with their domestic animals. Not only dogs and cats but chickens and other fowl and, occasionally, pigs and small goats, walk in and out of many farmhouses almost at will. A farm woman who was keeping a small pig in the house explained, "I'm fattening him. It's easier to feed him here. Outdoors, you throw something to him and the other pigs take it away. He's very tame. The children call him *Sagui* and he knows his name. When I go out to the field, he goes along with me." In the house of a village official, which is ordinarily kept quite clean and neat, several hens, roosters, and little chickens, in addition to the family's two dogs, are often to be seen. When visitors are present, the housewife makes occasional and rather unsuccessful attempts at driving them out.

Children sometimes give names to small animals, as did a 10-year-old girl in the village to the two young kids her family owns, calling them respectively *Cravinho* and *Crarinho*.¹⁵⁷ Although cats are rarely named, a boy in the village who is quite fond of a kitten someone had given him, calls it *Caiapiázinho*.¹⁵⁸

The following sentences, written by a school-boy, indicate the degree of affection which sometime develops between animals and humans:

¹⁵⁷ Corruption of *Clarinho* (Little Light One). *Cravinho* means "Little Carnation."

¹⁵⁸ *Zinho* is a Portuguese diminutive. *Pidá* is a Guaraní term of affection for a child. The meaning of *caia* is not clear.

I have a young calf called "Little Jaú." He is a good little calf, and a lot of fun. He bellows something pretty like and digs into the dirt with his hoofs and horns. He is a mixed-blood, but a good one. In the morning, he is there bellowing for me to open the gate, to let him eat *rastolho*.¹⁵⁹ After he has eaten all I will give him, he bellows to be let out to pasture. He used to be a little wild, but I am taming him and I curry him every day with the currycomb.

Another schoolboy wrote the following paraphrase of a song about the ox which is rather common in Brazil and which seemed to express his own sentiments.

The ox, on the day of his birth, knows nothing of the hard life to come;

Only two or three months and he will begin to bear heavy burdens.

If his owner decides not to sell him to the slaughterer, He is happy and thinks to himself,

"Who knows? Perhaps I am not going to be killed?"

I am a good Little Ox,

Born in the month of May.

I was brought into this world only to suffer and to work.

Ever since I came into the world, I have had to plod long distances and to pull heavy loads.

My coming into the world

Was only to suffer and to work.

The principal burden I bear is a big clodhopper (*cabocão*)

Who strikes me with a club and sticks me with a goad;

And if I ram him with my horns and he is injured,

He will say, "Away with this ox to the slaughterer;

None like that can pull my *carro*!"

Then, there on the hill,

I will see two horsemen with ropes, coming;

One is my master,

And two dogs following;

And soon it will be all over with me.

BEGINNINGS OF CATTLE RAISING AND DAIRYING

Although cattle have been raised in the community ever since it was settled by Europeans, the number of farmers who possessed herds, as well as the number of head involved, have always been small. Most farmers have no cattle. One farmer, however, has been gradually building up a herd over the past 30 years. Another farmer began to keep cattle about 18 years ago and a third farmer about 10 years ago. These three men now have, respectively, 181, 360, and 15 head. Four other farmers began raising cattle from 2 to 5 years ago and now have from 17 to 119 head each.

The farmer who began building up a herd 30 years ago, says:

My life has been like a romance. When I was a boy, I began working as a farm hand for 1 *milreis*, 200 *reis* a day.¹⁶⁰ Then my uncle let me drive his pack train. He had 15 burros. He paid me 17 *milreis* a day. Once as I was returning with the pack train from São José dos Patos, a Portuguese who lived along the road called out, "Don't you want to buy a cow?" I had no money. But I had a mare that I had been offered 100 *milreis* for. I asked the Portuguese how much he wanted, and he said, "300 *milreis*." When I told him I couldn't pay that much, he asked, "How much can you pay?" I studied a bit and then I said, "130 *milreis*." The cow is yours," he said. There was a pretty little calf with her. The Portuguese said, "You bought the cow; better take the calf, too." I offered him 50 *milreis* and he accepted it.

Then I had to do some hustling. I went to the man who had offered me 100 *milreis* for the mare and he bought her. Now I had 100 *milreis*. Then I went to my uncle who owned the pack train and asked him to lend me the rest of the money I needed. He did, and I settled the matter with the Portuguese and brought home the cow and the calf. That was 30 years ago. With that cow and her calf, I began to build a herd. From that day to this, my principal interest has been in raising cattle. I borrowed a little money and bought a few more head. They were cheap in those days. Even some years later, when cattle were worth more than when I made the deal with the Portuguese, you could buy a good heifer or a good steer for 100 *milreis*. Little by little, I built up my herd, until today I have 181 herd and 90 *alqueires*¹⁶¹ of pasture. Raising cattle is a good business.

To prepare his pasture, this man says:

I cut off a piece of timber and made the wood into charcoal. I then planted corn on the land for the next 3 years. When the third crop was still young, I sowed grass seed among it and by the time the corn was ripe, the grass had begun to take over. I used eight sacks of seed to each *alqueire*.¹⁶² It took a year for the grass to get a good start. When the grass had gone to seed, I let the cattle in, and they helped seed those spots where the grass had not yet caught on.

All the work with this herd, including the milking daily of 30 cows and hauling the milk a mile and a half out to the road to be picked up by the bus, is done by this man and his family.

Few cattle in the community are not of mixed breed. There are several part-Holsteins and an occasional part-Shorthorn. One farmer, a Hungarian immigrant, has two Holstein bulls. The

¹⁶⁰ The *milreis* used to be the medium of exchange in Brazil. As the name indicates, it was equal to 1,000 *reis*. In 1942, it was substituted by the *cruzeiro*, with the same value.

¹⁶¹ About 540 acres.

¹⁶² About 6 acres.

¹⁵⁹ Ears of corn imperfectly filled out.

zebu is much liked for its hardy characteristics and especially for its resistance to insect pests (see pl. 20, *g*). Many local cattle are descendants of the zebu, mixed especially with the *caracú*.

Cows are milked only once a day, early in the morning, usually about sunrise. The quantity of milk obtained from each cow is relatively small. They are then put out to pasture and left until about sundown when they are driven into the cattle yard for the night and the next morning's milking. The milk is put in cans of from about 2 to 11 gallons each¹⁶³ and taken to Boa Vista, where it is delivered to *leiterias*, or raw-milk stations which sell directly to the consumer.

Cheese occasionally is made, but rarely for other than home consumption. A piece of the lining of a cow's stomach used to be dropped into the milk to aid coagulation. "The same piece worked well for 6 months, or so," said an informant. Today a coagulant purchased at the pharmacy is used instead. A "pinch of salt" is also added. When the milk is well curdled, the mass is put in a cloth bag and hung to drain. The curds are then placed in a tin can like one seen being used which was about 6 inches in diameter and 8 inches high and had its sides perforated to permit any remaining whey to escape. A weight is laid on the curds to hasten this process and left about a day, after which the rather soft cheese is taken out ready for use.

Of the several kinds of grass that grow in the community, the *catigueiro*, or *gordura* (literally, *fat*), is preferred for pasture because of the ease with which it can be seeded, as well as its vigorous growth. Local residents distinguish three varieties: the *Negro Hair* (*cabelo de negro*), the purple, and the white. The first seeds were brought into the community only 8 years ago. It has spread so rapidly that farmers who do not raise cattle often protest bitterly against it. "It has become a pest (*praga*) that no one can stand," said a farmer. "It just takes over the land. Once it gets into your fields, there's no way to get rid of it."

THE DOG

The dog, and especially the hunting dog, is of considerable importance in the life of the community. In the village, there are approximately

70 dogs. Six families have three each and one family has four. On the surrounding farms, two dogs per family are common; several families have five or six and one family has eight. On one farm are kept 40 dogs, used especially for hunting deer.

All the dogs are of mixed breed. No two observed are alike in form or color. Many are divided, however, into precise classes by their owners, in keeping with hunting or herding characteristics. These classifications include:

Portuguese term	English translation ¹⁶⁴
Paqueiro	Hunter of <i>pacas</i>
Perdigueiro	Hunter of partridges
Veadeiro	Hunter of deer
Mestre p'ra porco	An expert with wild pigs
Mestre p'ra capivara	An expert with <i>capivaras</i>
Boiadeiro	Cattle herder

Other dogs have, so to speak, no specialty. If one inquires of their owner what they are used for, the reply ordinarily is, "They are only to keep one company."

At first sight, it would seem that many of these dogs are little appreciated. With only one exception among those observed, they are thin, hungry-looking, and unkempt and often have running sores, especially on the ears. Their appearance, however, merely reflects the fact that the dogs live, eat, take shelter, and suffer privation and the attacks of insects along with their owners in a common lot. If there is food, they are fed; if food is lacking, they make the best of it. If insects attack, that fact is considered to be in the nature of things, as similarly is the cure of the sores which the bites produce.

There are numerous evidences of sentimental attachment and even admiration, on the part of the men for their dogs, especially for those employed in the hunt. One hears remarks like the following, "Since Despique died, I have lost every desire to hunt. He was *some* dog! A better hunter of *paca* I never saw." "Do you remember him?" a bystander is asked. "Do I remember him?" comes the reply. "I should say I do! What a good dog he was to have on a hunt." The dog in question has been dead nearly 6 years. Reminiscences of this sort are common in the conversation of the men when they get together, and reveal sentiments not unlike those shown toward human beings. A

¹⁶³ The cans are of 10, 15, 20, 25, and 50 liters.

¹⁶⁴ Translations here, as elsewhere in this publication, are made freely, in an attempt to render into English as precisely as possible actual meanings.

friend of Quim, a villager noted for his hunting, was asked, "What would Quim do if someone harmed his dog?" "Listen!" was the immediate reply, "If someone so much as touched a hair of that dog, Quim would kill him." Although perhaps an overstatement, the remark is not uncommon. "Don't you know he thinks as much of that dog as of a son?" added another friend. "How many times he has hunted with him!" Owners readily show satisfaction and pride when their dogs are complimented and betray in the manner in which they glance at them the affection they hold. If a dog is missed, the owner at once drops whatever work he may be doing and goes to look for it, inquiring anxiously of each person he meets and not resting until the dog is found, either alive or dead.

Shortly after the first contact with Europeans, the native inhabitants took over the dog, and he became an important assistant in their daily struggle for existence. The presence of proportionately so large a number of dogs in the community perhaps represents, at least in part, the continuance of a cultural pattern handed down from Indian forebears. The hunt was once an extremely important means of providing food for the inhabitants and even today it is not negligible in this regard. In the thick tangle of vines and underbrush of the forest, the dog was an almost indispensable aid in tracking down game and in forcing it out of hiding places, and also in orienting the hunter so as to bring him safely through the dense growth, the meantime the dog's sharp senses discovered dangers such as poisonous snakes that lurked along the way. The indispensable character of this assistance is reflected in the common phrase, "to be in the *mato* without a dog," which is used metaphorically when referring to any virtually insurmountable obstacle.

Indicative of the personal character of the relationship between a man and his dogs is the fact that every dog, without exception, has a name. Some of these names merely reveal sentimental attachment. Other names, however, symbolize virtues valuable in the hunt or for other purpose, either possessed by the animal in question or desirable in him, like the following:

<i>Name (in Portuguese)</i>	<i>English Equivalent</i>
Alerta-----	Alert.
Batalha-----	Battle (i. e., a battler).
Briosa-----	Lively, or Courageous.

<i>Name (in Portuguese)</i>	<i>English Equivalent</i>
Cacique-----	Chief, or Leader.
Campêro-----	Hunter - of - the - Deer - That - Live-in-the-Open-Country (<i>caado campêro</i>).
Certeza-----	Certainty (i. e., a sure hunter).
Combate-----	Combat.
Cuitêlo-----	Humming-bird (i. e., one with quick movements).
Despique-----	Sprightly, or Clever, or Ingenious reacts instantly to any challenge).
Esperto-----	Sprightly, or Clever, or Ingenious (the word has several equivalents).
Faisca-----	Flash, or Spark (from its speed and nimbleness).
Farol-----	Lighthouse, or Headlight (i. e., one who shows the way, or signals to others the location of game).
Furão-----	"Penetrator" (i. e., one who opens the way into the deepest recesses of the <i>mata</i>).
Jagunço-----	Bandit (fierce assailant).
Joque-----	Jockey (from its speed).
Marcante-----	"One-Who-Marks" (two meanings: (1) one who keeps indicating where the game is; (2) one who sets the rhythm of barking in the hunt).
Matêro-----	Hunter - of - the - Deer - That - Live-in-the-Mata).
Mirante-----	Turret (i. e., one who spies out game at a long distance).
Noticia-----	News (i. e., the first one to "announce" the presence of game).
Piloto-----	Pilot.
Primôr-----	"One-Who-Has-Delicacy," or Excellence, or Elegance (the word has several equivalents).
Proviso-----	(Altered form of <i>Improviso</i> : The Unexpected or "One-Who-Improvises").
Rapina-----	Raptor.
Rebate-----	Signal-of-Alarm (from its habits in the hunt).
Rondo-----	(Masculine form of Ronda: Night Watchman.)
Tigre-----	Tiger (from its strength).
Tirano-----	Tyrant (cruel in the hunt).
Topéte-----	"Topknot" (a slang phrase for "one who is bold, capable of facing anything").

Other names commonly used are those of personages or titles which possess prestige (or have possessed it in the past): Duque (Duke), Lorde (Lord), Sultão (Sultan), Barão (Baron), Nabuco (a prominent nineteenth-century Brazilian politician and statesman), Pery (a famous Indian hero in the Brazilian novel *Guarany* by José de

Alencar), Nero, Tupí, Lampeão (a famed bandit of the Brazilian *nordeste*).

Many names merely describe some specific physical or psychological trait which the animal in question possesses. Among these names are:

Name (in Portuguese)	English Equivalent
Alegre	Happy.
Arrogante	Arrogant.
Biscuit	(A slang expression for "an attractive girl").
Bisúga	(A term of endearment; of Guarani origin?)
Bolinha	Little Ball (from its shape when a small pup).
Bozinho	Little Ox (from its size and strength).
Brazina	(Altered form of <i>brazinha</i> : little ember; from its color).
Codorna	(A Brazilian bird which defends itself by a change of color).
Carimbo	Rubber stamp (from its spots).
Clarim	Clarion (from the high pitch of its bark).
Colêra	(Altered form of <i>coleira</i> : dog collar; from the different color around its neck).
Fineza	Elegance.
Fubá	Maize meal (from its color).
Fusco	Tawny.
Garboso	Proud, or Affected.
Gigante	Giant.
Javali	Peccary (from its medium-brown color).
Leão	Lion.
Lírio	Lily.
Magriço	(Augmentative form of <i>magro</i> : thin).
Malhado	Spotted.
Mico	(A species of monkey; from its dark color and lively and intelligent expression).
Mimo	(Substantive form of <i>mimosa</i>).
Mimosa	Delicate, or Neat.
Mulata	(Feminine form of mulatto).
Mulêque	(Literally, an urchin; actual meaning here: frisky, mischievous, spiteful, rascally).
Nebrina	(Altered form of <i>neblina</i> : fog; from its color).
Pandêro	Tamborine (from its bark).
Pelintrá	Dandy.
Pinta	Spots.
Pitôco (or Tóquinho)	Stub tail.
Requinta	(A sort of clarinet; from the timbre of the bark).
Rolinha	(A species of the dove family; from its color).

Name (in Portuguese)	English Equivalent
Saguí	(A species of monkey; from its general chocolate color and white ears, and its lively and intelligent expression).
Tica	(A slang phrase for "The Little Thing").
Tini	(Altered form of <i>tinir</i> : peal; from the timbre of its bark).
Trelente	(A slang phrase for "Full-of-Tricks-and-Artifices").
Veludo ¹⁰⁵	Velvet (from the texture of the hair).

BEES

One farmer in the community keeps bees, which he purchased a few years ago from a neighbor of German origin who no longer lives in the community. He now has 30 hives. If the bees are unimpeded by drought, the farmer says, each hive will produce around 27 liters, or more than 6 gallons, of honey a year, since in this climate nectar is available virtually the year around. Most of the honey is sold in nearby towns. The present price is 7.50 *cruzeiros* a liter, or about \$1.49 a gallon, and the honey is delivered in lots of from one to a hundred liters.

OUTBUILDINGS

The outbuildings on the *sítios* are relatively few. On one of the more adequately equipped *sítios* visited, for example, there is a *paiol*, or crib for storing onions or other produce, especially in the dry season (pl. 20, *e*). It is set on four heavy wooden supports driven into the ground. The sides are of *taguara* poles and the roof is of *sapé*. There is a wooden door. Nearby is a *chiqueiro*, or small shelter for pigs, the sides of which are of poles and the roof of *sapé*; and a *galinheiro*, or small chicken house, of *pau a pique*, also with a roof of *sapé*. In a nearby field is a *rancho*, or shelter for farm produce, consisting of a roof of *sapé* supported on poles (pl. 15, *f*). On another *sítio*, the only outbuilding is an unused shelter for pigs. On a third *sítio*, there are a small chicken house, two of whose sides are of galvanized iron and the others of chicken wire, and a privy of rough-hewn boards, with a tile roof. On still another *sítio*, there are a shed about 6 by 12 feet which is used

¹⁰⁵ Additional names used in the community include: *Violeta* (violet), *Oriente* (The East), *Congonha* (*maté*, or *Ilex amara*), *Japôna* (local term for a Japanese woman), *Julim* (altered form of *jolie*), *Rodaque*, *Sabáio*, *Paiva*, and *Tapêna*.

to shelter farm implements and a *charrete*,¹⁶⁶ three of whose sides are of poles and the fourth of large, rough-hewn boards; a small chicken house, three of whose sides are of poles of bamboo and other wood and the fourth is open; a shelter for pigs, about 9 feet square, with sides similar to those of the chicken house, except that the poles are placed horizontally instead of vertically, and the whole is supported on four large stakes; and a structure for feeding small chickens separately from large chickens, made of poles and conical in form, about 3 feet wide at the base and 6 feet high. The roof of the shed is of galvanized iron and those of the chicken house and the shelter for pigs are of tile. Other *sítios* visited usually had a small shelter either for chickens or pigs. One *sítio* had no out-buildings of any kind. There are no barns in the community.

On one of the *sítios* where maize is ground, there is a small machine shop near the mill, made of brick and calcimined on the outside, with a dirt floor and tile roof.

At the *séde*, or seat, of the *fazenda* that lies at the edge of the village, there are a number of buildings other than the house. Opposite the latter, beyond a yard where the cattle come in, is a dwelling about 12 feet wide by 15 feet long and 8 feet high, used by an employee and his family. Attached to the left side of this dwelling is a shed, open at the front; then another dwelling similar to the first; then another shed; and, finally, a third dwelling, equal in size to each of the other two. Over the five structures built side by side is a long, continuous roof of tile. At one end of the cattle yard, located so that, together with this structure and the farmhouse, it forms a rough U, is the sawmill referred to in the section on Lumber (p. 91). Near the sawmill and to one side of the farmhouse, are two large storerooms, each about 20 feet in width and 16 feet high at the ridge pole. One of the storerooms is 13 feet in length and the other is about twice as long. Beyond the storerooms is another dwelling for employees. On the other side of the house are two low sheds, one of which is used for chickens, the other for calves. Immediately back of the farmhouse is a small privy. All the buildings are of brick, covered with *reboque* and calcimined in white, with tile roofs.

MANUFACTURING PROCESSES

A number of relatively simple manufacturing processes are undertaken in the community. Although no one at present makes *pilões* for his neighbors, occasionally a family will prepare their own by burning out the central portion of a log of the desired size and trimming the cavity with a steel chisel and a mallet.

On 9 of 17 farms visited, home-made soap is prepared for the family's use. It is usually made of ashes, beef suet (or lard, if available), and water. Sometimes, either lye or the leaves of the *guaxima* (*Urena lobata*), *saia branca*, or *tuna* (a species of cactus) plants are added, although the lye is usually considered an unnecessary expense, especially at present prices.

Holes are punched in an empty gasoline tin and the tin is filled with ashes. Water is added and allowed to drip through into a vessel set underneath. Meanwhile, suet is melted in a *tacho*, or copper pan, and the dark-colored liquid from the ashes is added slowly until "there is enough to cut the fat." The mixture is then cooked until quite thick, being stirred occasionally, if the fire is burning low; continuously, if the fire is hot. In the latter case, cooking can be completed in about 1½ days; in the former, in 3 to 4 days. The soap is then left to cool, subsequent to which it is cut into pieces convenient for handling. It is used for washing clothes, dishes, hair, and the body. Many families, even among those which are able to purchase factory-made soap, prefer the home-made variety. It is thought to be especially efficacious in the treatment of skin diseases and dandruff. "It is mighty good for the itch," said a farm woman, "and also for rash."

A considerable quantity of *linguiça*, or the Brazilian variety of pork sausage, used to be made for sale in the village and surrounding area. Pork was cut up in fine pieces and seasoned with salt and parsley. Pepper, garlic, onions, marjoram, or vinegar sometimes were also used. The following morning, the sausage was stuffed into well-washed casings of pig or goat intestines, and smoked for a day.

As has been indicated, *tucum* fiber is occasionally used. Several fronds of the *tucumã* palm are cut in an available patch of timber and brought home. They ordinarily are around 18 inches long and 2 or 3 inches wide at the largest part. The

¹⁶⁶ Tools and Other Equipment, p. 55.

upper side is smooth and the lower rough. The fleshy part of the frond is stripped off, leaving the fibrouslike veins, which are placed over the thigh, as the worker kneels, and smoothed with the hand, after which they are twisted tightly into a slender thread. When the latter is bent in the middle and one end released, it automatically wraps itself around the other half as it unwinds, thus making a larger and stronger thread, ready for use. Even a strand about the size of thread used in sewing is difficult to break without a quick jerk in which considerable force is exerted. "Try it," said a villager, after preparing a few strands. "It is *barbarously* strong." It is used, as has been indicated, for fish lines and, occasionally, to make a *tarrafa*.

The hulling and roasting of coffee beans are referred to elsewhere.¹⁶⁷ Other local manufacturing processes include the making of baskets, pottery, sugar, bricks, charcoal, brooms, fireworks, and the *arapuça*, the grinding and toasting of *farinha de milho*, or coarse maize flour, the sawing of lumber, and the distillation of *pinga*, as well as a few other processes, all of which are considered below.

HANDICRAFTS

The spinning and weaving of home-made textiles, once important activities in the community, are no longer to be seen. The products of national and foreign power looms and spindles have replaced entirely the clothing produced by these manual arts. Hat making is unknown. Mats are woven from the cattail plant. The rope used to supplement the extensively employed *cipó*, is factory-produced and imported into the community. Leather work is confined to the repair of shoes by a part-time cobbler who also is the village horseshoer and one of its two barbers. A man 61 years old used to make violas, and on occasion will proudly exhibit the last one he built many years ago. A young farmer possesses, and still uses occasionally for *festas*, a set of drums made by his deceased father. Another man is adept at repairing these instruments. The only wood-working is done by two part-time carpenters, one of whom on occasion, as has been indicated, makes chairs, tables, doors, window frames and, more

rarely, a water-wheel; the other man makes chairs, benches, tables, and coffins. A boat and oars occasionally are made of serviceable, rough planks by farmers living near the river. The only metal working is that done by the villager who shoes horses and by a part-time tinsmith, most of whose work consists in soldering handles onto tin cups or making basins or crude kerosene lamps by soldering together pieces of tin cut from tin cans. The only stone work is that of a villager who knows how to break, chip, and lay stone to make the narrow sidewalks and gutters in the village (pl. 13, f).

Crude brooms for domestic use are made by many housewives. From a plant (*Baccharis*) commonly found in patches of timber and known locally as *vassoura* (*vassoureiro*), a number of twigs are broken off and tied with *cipó*, old cord, or a piece of wire, around a stick about 4 feet long. This broom is commonly used to sweep the *terreiro* and earthen floors.

Tanning is limited to the hides of animals taken in the hunt, especially the wild pig, *cavivara*, and deer, and of a few domestic animals like the goat and an occasional sheep, and is almost entirely for home use. One man occasionally prepares for sale a *pelego*,¹⁶⁸ made from a sheepskin. The local tanning process is quite simple and consists in stretching out the pelt and scattering over it crushed alum and leaving it to dry for 5 or 6 days, subsequent to which all remaining bits of flesh and membrane are scraped away with a sharp rock.

A few women and girls do embroidery work and some know how to crochet. One woman occasionally knits garments for her neighbors and another has recently begun to knit sweaters and baby socks for sale in São Paulo. Perhaps a third of the women know how to sew. As has been indicated, 8 of the mothers on the 17 farms visited and at least 13 women in the village have sewing machines, five of which are operated with pedals. At least seven women sew for their neighbors, making such articles as women's dresses, blouses, skirts, slips, men's shirt and trousers, and, occasionally, aprons and men's coats. One woman weaves old rags into saddle blankets for home use and, occasionally, also for sale to neighbors.

¹⁶⁸ The *pelego* is used over the saddle to make it more comfortable for the rider.

¹⁶⁷ See Agriculture, p. 63; and Pinga, Tobacco, and Café, p. 41.

BASKETRY

Basketry is the principal handicraft in the community. Crude, but strong and serviceable articles are produced, without ornament or decoration except, occasionally, that obtainable by alternating the darker outer side of the strips of *taguara*, of which they are made, with a lighter inner side. *Taguara* is excellent for this purpose since, when green, it is pliable and bends readily into any desired shape and, when dry, it holds that shape firmly.

At least three men, but no women, regularly make baskets for their neighbors. Many farmers also know how to construct them for their own use. Regularly made in the community are a number of baskets of various shapes and sizes, including the *jacá*, used with the pack saddle, and the *embornal*, or feed basket to go over a horse's nose. Also commonly made are *apás*, or winnowing trays, and *peneiras*, or sieves, including the large *sururuca*.

Taking up a green *taguara* pole, a man first splits off strips the length and width of which are in keeping with the utensils to be made (pl. 12). If a large basket is desired, the strips may be over an inch wide and several feet long; if a *peneira*, they are much shorter and narrower. Each strip is then taken and placed on a wooden block and hammered with a wooden mallet to make it more pliable. To begin a basket, several strips are laid side by side on the ground and other strips are interlaced at right angles, the numbers in each case depending upon the shape and size desired for the bottom of the basket. When the base is complete, the strips are bent upward and other long strips interwoven around them at right angles, until the sides are finished. The ends of the strips are then bent over and tucked in securely to make the rim, sometimes with a braided effect. A strong, pliant strip of other wood may also be laced into the rim, to give the basket greater strength.

MAKING OF FIREWORKS

The rockets and *bombas* used in connection with religious or secular ceremonies, are all manufactured locally. The present artisan is the mail carrier who has performed this service during "more than 20 years" in a small shop in the back yard of his home.

"They are not hard to make," he says, "but one must be very careful or they will not go off as they should." Fuses and powder are the only elements purchased, usually in Boa Vista, occasionally in São Paulo. The sticks for guiding the rockets are cut in a nearby patch of timber from either of two plants whose branchless stems ordinarily grow to about 5 feet in height and "the thickness of a finger." The plant most used is called locally *vara de rojão* (rocket stick), or *cravorána* (*Ambrosia polystachya*). The other plant is known as *buva*. When dry, these sticks are quite light. The tube is made of a section of *taguara do reino*, about 6 inches long, cut so that one end is closed off by the natural joint of the *taguara*.

Powder is poured into this tube and tamped down tightly with a wooden rod. A fuse is inserted and held in place by a *bucha de terra*, a fibrous growth of a plant related to the gourd, squash, and cucumber, or the *Luffa cylindrica*, sometimes also used as a sponge for washing dishes. The tube is then inverted and attached with a cord to the guiding stick. Small holes are bored in the tube near its upper extremity, through or just under the joint, and the short fuses of as many *bombas* as desired, usually either one or three, are passed through into the powder.

When the main fuse is lighted and the powder in the *taguara* tube set afire, the rocket will rise, guided by the stick, until all the powder is consumed, shortly before which the fuses of the *bombas* will catch afire and each, in due course, will go off with a loud "boom."

The *bombas* are made of special powder, tightly packed in strong cardboard or cloth containers, the size of which varies but averages about an inch and a quarter in diameter and 5 inches long. Besides being used for rockets, they are also shot off in *baterías* (batteries). A *bateria* is made by attaching, at intervals of several inches, from 10 to 24 *bombas* to a limber but strong stick several feet long which has been stuck vertically into the ground. The lower fuse sets off the first *bomba*, and this explosion sets fire to the fuse of the second, and so on. The last *bomba* is about twice the size of the others and is sometimes called the *morteiro*. This term is also applied to a large *bomba* set off singly on the ground.

The artisan takes pride in his fireworks, which he himself usually sets off at a *feira*, and he makes them with loving care. "These factory-made fireworks never are satisfactory," he says, "they are made any old way just to sell them. No one keeps thinking, 'Will they be pretty or ugly at the festa?' But if one of my rockets does not rise or a *bomba* does not go off as it should, everyone will look at me, because they know I made it. Not a single one of my fireworks has failed, thank God. That's because I take lots of pains with them. I am always turning people down; for if I can't make these things well—if I don't have time to take pains with them—I won't make them at all. I prefer to lose a customer rather than to have him disappointed." At the last *feira* of São João, requests from the village and the neighboring towns of São José dos Patos, Piracema, and Boa Vista totaled 30 dozen rockets.

POTTERY

Dona Maria, a woman 37 years of age, who lives on the border of the community, halfway to Boa Vista, is the only person who now makes pottery, although a neighbor woman occasionally assists her with this task. An elderly woman living in the immediate vicinity and another elderly woman on the other side of the village, also know how to make pottery, but neither has practiced the art for several years. Even Dona Maria makes pottery infrequently, as much as a year or two sometimes elapsing between firings. She makes vessels for her own use and, on request, for relatives or acquaintances who live nearby. When her needs, added to these requests, reach approximately 30 items, the vessels are all prepared at one time.

The clay used is almost black in color. It is obtained from the edge of a brook near Dona Maria's house. She is careful to take it from below the topsoil, so that it is free from organic matter. Dug out with an *enxada*, it is brought into the house and left several days to dry, after which it is pulverized in the *pilão* and passed through a sieve, made of *taquara*.

A quantity of this sifted clay is then either put in a large wooden bowl (*gamela*) or dumped onto a wide board. Water is added, little by little, and the mass is kneaded like dough for bread, until it has the necessary consistency. Portions are then

detached from the larger mass and rolled into cylinders about three-fourths of an inch thick and 15 to 30 inches long. The first cylinder is coiled flat on the board, each successive coil touching the one previously laid down, until the whole reaches the size desired for the base of the vessel. As each coil is laid down, Dona Maria works it with her fingers until it is attached firmly to the other coils already in place.

The coiling of these cylinders one against the other is then continued upward to form the sides and top of the vessel, so that the complete outline eventually emerges in rough form. A corncob, the rough outer portion of which has been burned off, is used to smooth out the larger irregularities, after which the vessel is further smoothed with a piece of gourd. The newly formed vessel is then left to dry naturally, a process which usually takes from one to two days, subsequent to which it is put in the kiln, along with other vessels, and baked.

To construct the kiln (*forno*), advantage has been taken of the differences in level provided by a nearby bank of earth. An excavation a little over 3 feet in diameter and extending down about 15 inches, has been dug in the bank. From the floor of this excavation, six round holes, each about 4 inches in diameter, have been dug down about 12 inches further into the bank. One of these holes is centrally located and the other five are disposed at equal distances about it, all being separated by enough dirt to avoid cave-ins. This constitutes the upper portion of the oven.

Below this portion, an opening around 15 inches high by an equal distance wide has been cut horizontally back into the bank. Immediately beneath the six holes, the opening has then been widened out until it is oval in form. This constitutes the chamber in which fuel is burned.

As indicated, approximately 30 vessels are baked at one time. These are placed so as not to interfere with the free circulation of air through any one of the six holes, after which the vessels are completely covered over with pieces of broken pottery. A fire is then lighted in the lower chamber and fuel added slowly so as to increase the heat gradually and thus avoid cracking any of the vessels. "When I can spit on them and the spit sizzles," says Dona Maria, "I know the clay is hot enough not to

break any more. I can then build up the fire as much as I like." Baking takes about half a day. Wood is used for fuel.

Although Dona Maria says she knows how to make "anything of clay," the vessels most commonly made are the *pôte*, the *moringa*, the *uscuseiro*, and the *forno* (fig. 13). The *pôte* and the *moringa* are used for holding water; the *uscuseiro* and *forno*, for cooking. The *pôte* is a cylindrical vessel around 16 inches high. The mouth is about 8 inches in diameter and the lower

large skillet about 16 inches in diameter and 4 inches deep, except that in place of one long, slender handle there are two short thick handles, one on each side. Since all vessels are made "by rule of thumb," the measurements here given are not standard but merely approximate the general average.

A *uscuseiro* was recently sold for 6 *cruzeiros* (32.6 cents). There is, however, no fixed price. Said an informant, "*É conforme a cara do freguês*" (It depends on the face of the customer).

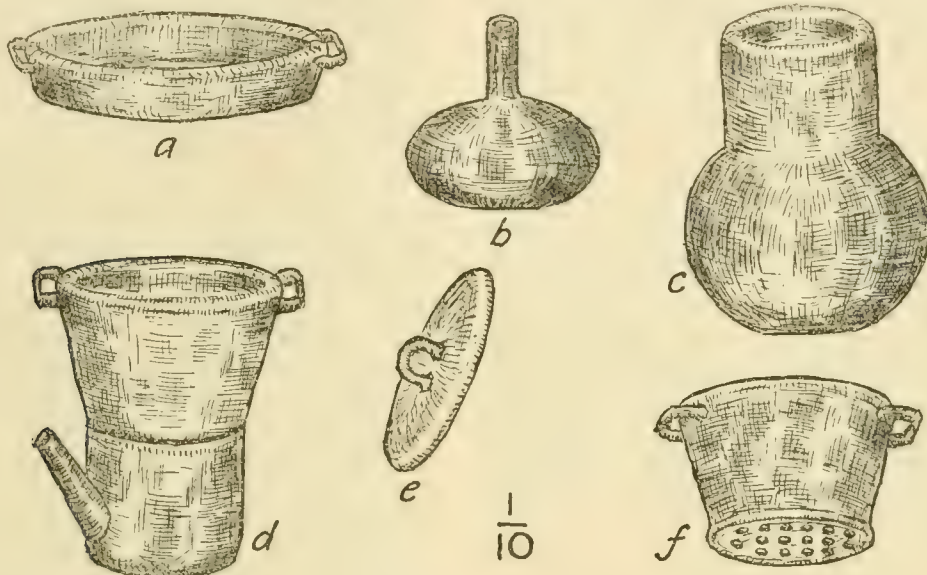


FIGURE 13.—Local pottery. *a*, *Forno*, used as a pan in cooking. *b*, *Moringa*, and *c*, *pôte*, each used to hold water. *d-f*, *Uscuseiro*, or vessel in which food is cooked by steam, showing the lid and cross section of detached upper part.

portion about 12 inches at the widest point. The *moringa* is a similar but smaller vessel, about 10 inches high, with a narrow neck only an inch and a half in diameter. The enlarged lower portion measures about 10 inches in diameter at the widest point. The *uscuseiro* is a vessel in which food is cooked by steam, made in one piece, about 12 inches high, with a spout attached to the lower part. It looks something like a bucket with flaring sides, cemented on top of a sprinkling can which has lost the nozzle off the spout. The upper and lower parts are separated by a layer of clay, perforated in several places to permit steam to rise into the upper part. The spout is used to remove the water from the lower section. Two small, thick handles are attached to the upper part, and there is a lid. The *forno* resembles a

THE ARAPUCA

The *arapuca*, or trap for catching birds, is used especially for the smaller species, although at times larger birds, like the *jacú*, are taken in it, and even small animals. It is made of *taquara*, bamboo, or similar wood. One that was observed in use had the form of a rough pyramid which was about 15 by 20 inches at the base and 10 inches high. To make it, strips of *taquara*, ranging from about 6 to 20 inches in length, are first cut. Two of the longer strips are then taken and linked together at their extremities with a piece of *cipó*, the length of which varies with the height desired in the finished trap but which in the one observed was around 2½ feet. The rectangle thus formed is twisted to make an X. The split pieces of *taquara* are then superimposed on each pair of sides alternately,

beginning with the longer pieces, in such a way that there eventually emerges a small pyramid whose sides are tightly held in place by the torcion exerted by the *cipó*. If the *cipó* is not tight by the time the last piece of *taquara* is inserted, it is twisted until the pyramid becomes a firm, solid structure.

A cleared spot called the *céva*, is then prepared in a promising place in a patch of timber, and food, such as rice, maize meal, or *quiréra*,¹⁶⁹ is periodically placed upon it to attract game. When the latter has become accustomed to finding food in this spot, the *arapuca* is taken and left a few days for the game to become familiar with it, after which it is set. One end is raised off the ground several inches and held in uneasy suspension on the top of a short stick which is tied to one or two other sticks planted upright in the ground. A twig is then inserted on the inside, close to the ground, and at right angles to these uprights. It is held in place by the slight pressure of the *arapuca* on the first stick mentioned. The slightest jar will cause this twig to fall. Two additional sticks are then laid at right angles to the uprights, one end of each resting on the twig and the other end inside the trap, so that any disturbance of these ends made by a bird or animal stepping on or brushing against them, will dislodge the twig from its lightly held position and drop the trap.

GRINDING MAIZE

The crushing of maize in the *pilão* or the *monjolo*, as has been indicated, is largely a matter of the past, although both means are still used on occasion for small amounts. Most of this work is now done by two mills, located on adjoining farms, which use water power and combine ancient techniques with modern machinery. One of these mills has been in operation 8 years in the same location and the other 9 years, 2 of them in the present location. Most farmers in the community now take their maize to these mills to be ground.

At one of the mills, water is diverted from a nearby creek by way of a narrow canal and made to fall upon a wooden water wheel about 7 feet in diameter and 30 inches wide, set in a depression below the level of the canal. The axle attached to this wooden wheel is of iron and is

supported on bricks. One end of the axle passes through a wall into a shelter where it is attached to an iron wheel that drives a belt. The latter in turn drives another and central axle which is attached by other belts to each of three different mechanisms for crushing and grinding maize.

The first of these mechanisms is composed of two flat stones (*mós*), each about 28 inches in diameter and a little over 4 inches thick, laid horizontally one on top of the other. The upper stone is set to rotate while the lower remains fixed. Above and a little to one side is a wooden funnel about 2 feet square at the opening and tapering to 6 inches square at the base to which is attached a wooden trough about 12 inches long and 6 inches wide. A short board swinging loosely on a nail driven into the funnel rests lightly on top of the upper stone as it rotates and thus transmits to the funnel some of the vibration of the mechanism. When maize is dumped into the funnel, the vibration transmitted by way of the board shakes the maize into and through the trough so that it falls, little by little, into a hole cut in the center of the upper stone and thence into the narrow space between the two *mós* where it is ground to a coarse meal (*fubá*). It then falls through a rectangular wooden trough into a large box below.

The second mechanism, the *cangiqueiro*, is employed in the preparation of *farinha de milho*, or maize flour somewhat coarser than that used in the United States. After being washed in a cement tank outside the shelter, the maize is placed in a wooden funnel similar to that used with the *mós*, whence it is shaken little by little down into a machine (of national manufacture) whose internal parts rip off the hull and tear out the germ. The broken parts then fall onto a continuously agitated sieve through which the finer particles drop onto a second sieve, while the larger particles, or that portion of the kernel minus the hull and the germ, is shaken out to one side into a wooden trough whence it falls into a second box. These larger particles are called *cangica*. Through the second and finer sieve, the hulls (*farelo*) drop into a wooden box while the *quirera*, or the germ and what clings to it, is shaken off to one side into a wooden trough and thence into a third receptacle.

The *farelo* and *quirera* are used as feed for domestic animals and fowls and have a ready sale. The *cangica* is turned into *farinha de milho*. It

¹⁶⁹ See Grinding Maize, below.

is first placed in the cement tank mentioned above, covered with water and left 3 days to soak and ferment. It is then dumped into a second partition of the tank, carefully washed and left to dry, after which it is carried to a second set of stones similar to those used to make *fubá* except that these stones are set vertically, where it is ground into a coarse flour. The latter is then taken to the *forno* for toasting.

The *forno* is a rectangular sheet of metal about 3 by 7 feet, under which is a brick firebox closed on all sides except for a narrow opening in the front through which fuel is inserted. The ground *cangica* is spread thinly over this metal sheet and the heat, which is maintained at a relatively constant temperature, toasts the coarse flour until the whole forms a large, thin, consistent flake, called locally *biçu*. When sufficiently toasted, the flake is broken up with a small roll of cloth and the *farinha de milho* removed and sacked. A high degree of skill obviously is required in this process, especially in controlling the heat and the time of exposure to it, so as to toast the flour adequately but not too much. Wood is used for fuel. The capacity of this mill is from 10 to 12 sacks of maize a day, each sack being of 60 kilos (132 pounds).

The second installation of a similar character is located on an adjoining farm, not over 600 yards distant. It also is run by water power, the source of the water being the same creek. The installations, however, are more recent, considerably larger and more modern. There are no *mós*; in their place is a modern machine. The water wheel is of wood, about 13 feet in diameter and 20 inches wide. The shelter is of brick covered with *reboque* and stands about 20 feet high. The roof is of tile. The interior is approximately three times that of the first installation and is divided into two parts. In one of these, which measures about 30 by 16 feet, is the *forno* for toasting *farinha de milho*, and in the other, which measures about 40 by 30 feet, are modern machines for grinding maize meal and making and grinding *cangica*, as well as a machine for shredding fodder for cattle feed. All of the machinery is of national manufacture, except that for shredding fodder, which was made by a United States company. The farmer who runs this mill set it up himself. The water wheel was

purchased in a town about 30 miles to the south of the community.

At each of the mills, maize is ground and turned into *farinha de milho* in exchange for the *farelo* and *quirera*, plus Cr.\$4.50 (about 24 cents) for each 40 kilos (88 pounds) of maize. This quantity produces about 20 kilos (44 pounds) of toasted maize flour. To the maize available locally for grinding are sometimes added quantities shipped in from the neighboring State of Paraná to the closest point on the rail line and thence trucked to the mills. The several products are also sold outside the community.

SUGAR MAKING

On an occasional farm which is still relatively self-sufficient, sugar is made for home use and, at times, for sale. On one such farm, cane is run through a simple press turned by animal power (pl. 15, *a*) and the juice (*garapa*) thus extracted is carried in buckets and put in a large copper kettle about 3 feet deep and 3 feet in diameter. A fire is built underneath and the juice left to boil for about 4 hours, or until the quantity is considerably reduced and the liquid has become a thin sirup. The impurities which rise to the surface as the boiling proceeds are removed with a metal skimmer which is about 8 inches wide and has a long wooden handle.

The sirup is then put in an iron drum and the copper kettle refilled. When all the juice has been boiled, the sirup is withdrawn from the drum and carried to the *tacho*, a large copper pan about 10 inches deep and 2 feet in diameter, where it is again boiled, with constant stirring, until it is about to crystallize into sugar. This process ordinarily takes approximately an hour.

Before the mass cools, it is poured into a wooden mold where it is left to solidify into *pães de rapadura* or, literally, "loaves of brown sugar." This mold consists of a flat box about 3 inches high and open at the top. It is divided into small compartments whose size and number vary with the size desired in the final product: $\frac{1}{4}$ kilo, $\frac{1}{2}$ kilo, or 1 kilo.

The farmer says that approximately 200 kilos (440 pounds) of *rapadura* are obtained from each kettle of cane sirup. He also estimates that his equipment, were it in continuous production, would turn out around 1,000 kilos (2,200 pounds)

of *rapadura* per month. The supply of cane on his and neighboring farms, however, does not make possible such large-scale operation.

Cidrão also is made on this farm. It is prepared by adding the pulp of the *cidra* fruit, a species of citron, to cane sirup before the final boiling. The *cidra* is grated on a heavy stone wheel, about 3 feet in diameter, which is turned by hand. The mass is then put in a *tipiti*¹⁷⁰ and the juice expelled. The *tipiti* is a flexible, oval-shaped basket, about 15 inches in diameter and 10 inches deep, made of *sapé*. At the upper rim, the ends of the *sapé* have been left loose to afford hand holds for pulling and twisting the basket to press out through its openings the excess liquid (pl. 12, *e*). The *cidra* pulp is then added to an approximately equal quantity of cane sirup and boiled until the whole is about to crystallize. It is then poured into small molds and left to cool, subsequent to which the cakes are wrapped in dry corn husks for selling as a confection.

BRICKMAKING

There are in the community two *olarias*, or small establishments for making brick. Only one of these is functioning at present and it began operations within the past year. Work is intermittent, depending upon local needs or requests from neighboring communities.

The *olaria* is located near a plentiful supply of clay. The upper 8 inches or so of topsoil are first scraped away because of their organic-matter content. The clay is then dug out with an *enxadão* and shoveled into a *caçamba*,¹⁷¹ in which it is hauled about 60 yards to the *picador*. The *picador* is a pit dug in the ground, about 5 feet deep, 6½ feet long, and 4 feet wide, the sides of which are then lined with boards. To fill it, approximately 15 trips must be made with the *caçamba*.

If the clay, as the local phrase has it, is "very strong," it is mixed with a small quantity of sand or, if "weak," with other clay which is "stronger." The sand is brought from *Cruz Preta*, a point about 4 miles away which is named, like the road itself, for a large cross, made of dark-colored wood, standing by the roadside. Water brought to the *picador* by way of a bamboo aqueduct from a nearby slough is then added, and the mass turned and

stirred with an *enxadão* and a shovel, by a man working in the pit, until it has the proper consistency. This process is "by rule of thumb" and requires considerable skill and experience.

After being left to stand until the following day, this viscous mass is taken out of the *picador* and shoveled into the *pipa* which stands alongside. The *pipa* is a wooden barrel about 5 feet high and 3 feet in diameter to whose upper part has been clamped a vertical axle which turns 13 iron paddles, each about 5 inches wide and 12 inches long, inside the barrel. The axle is made to revolve by means of a pole about 12 feet long and 10 inches in diameter, called the *manjarra*, which is pulled round and round by two mules or burros. When the *pipa* has been filled, the animals are set to work at the *manjarra* and the mass is thus thoroughly mixed and passes, little by little, out a hole about 12 inches square, cut into the lower part of the *pipa*.

With a *bodoque*, a girl then cuts and scoops up chunks of this well-mixed clay and lays them on a wheelbarrow. The *bodoque* is a piece of wood about an inch and a quarter wide which, after being bent to form a semicircle, is held fast by a taut wire about 16 inches long. The wire cuts through the clay and enables it to be picked up in small amounts to facilitate handling. The chunks are then hauled a few yards and dumped on the ground near a wooden bench, called the *banca*, where a man picks up the clay with his hands and places it in a wooden mold, about 2 feet long. The mold has two separate compartments, each the size and form of the desired brick. They have been lightly sanded so that the clay will not stick to the form but come away easily. When the mold has been filled, the excess clay is cut away with a second and smaller *bodoque* and the mold is carried and upended onto the ground at a convenient spot (pl. 8, *b*), so that the two newly formed bricks drop out alongside the other bricks molded that day, all of which are then left to dry for 24 hours.

The bricks subsequently are stacked in long rows about 5 feet high, called *gambetas*, and tiles are laid over each row so that the bricks are protected sufficiently to withstand an ordinary rain. They are left here from 3 days to a week, depending on the weather and the consequent rate of drying, after which they are hauled to a nearby shelter for storing or taken directly to the kiln.

¹⁷⁰ On this farm, the word is pronounced *tapiti*.

¹⁷¹ See Tools and Other Equipment, p. 55.

The capacity of the kiln is 22,000 bricks (pl. 8, *d*). The sides are of brick, without *reboque*, and are 16 feet long and some 20 feet high. The roof is of tile and is raised somewhat above the walls to aid the circulation of air. In the lower portion of the front wall, three spaces, each about $2\frac{1}{2}$ by $2\frac{1}{2}$ feet, have been left open, through which to put fuel. In a side wall, a door about 6 by 3 feet has been made through which to carry in the newly formed bricks. Starting with the opening in the front wall which is farthest from the door, bricks are laid, side by side, in two long parallel rows, one to each side of the opening, the entire length of the building. On top of each of these two rows, bricks are then laid at right angles until the first layer is entirely covered. In each row, however, this second layer is allowed to overlap a bit in the direction of the other row so that as additional layers are added, each new layer also overlapping a little the one below, the two parallel rows gradually approach and finally come together to form a long narrow tunnel which runs the entire length of the building, from the opening in the front wall to the back wall. When a fire is started just inside the opening, the heat will flow readily along this tunnel and thence to the rest of the kiln. As was done in the case of the second layer, the bricks in each succeeding layer have been set at right angles to the bricks immediately beneath. Since the bricks have been roughly made, they in no case fit tightly together; and, as they dry, they shrink somewhat, so that still larger spaces begin to appear between the bricks and the heat is thus able to pass more readily around them. Similar tunnels are then laid from each of the other two openings, after which the remaining bricks are stacked over and around the three tunnels until the kiln is full. The main opening is then sealed up with mud and brick, and fires are started and kept burning for 48 hours. The fuel is wood, and approximately $1\frac{1}{2}$ cubic meters are used per 1,000 bricks.

The bricks are subsequently left in the kiln to cool for a week to 10 days. Those on the bottom nearest the fire are "better baked" and sell for a higher price since "they are impervious to water and can be used for wells and similar purposes." At present, these bricks are being sold at 350 *cruzeiros* (\$19) a thousand and the other bricks at 250 *cruzeiros* (\$13.60) a thousand.

DISTILLATION OF "PINGA"

Most of the *pinga* consumed is imported from outside the community. Two farms are equipped with the necessary apparatus for its manufacture in considerable quantity, but on only one farm, or that on which is located the *casa grande*, or large house referred to above,¹⁷² is *pinga* now being made and then only periodically. There are no small, private stills.

On this farm, falling water furnishes the power to crush the cane. From a nearby brook, water is led off by way of a shallow ditch into a long, wooden trough about 15 inches wide and 15 inches deep. At the point of junction with the trough, a simple means of control known as the *ladrão* (thief) has been set up. It consists of a wooden plank about 20 inches square, set vertically in wooden grooves. When this plank is removed, the water flows into the trough; when it is in place, the water is diverted to one side, whence it eventually finds its way back to the brook at a point farther down. When released into the wooden trough, the water flows with some force about 75 feet to the *engenho*, or mill for crushing the cane.

At this point, advantage has been taken of an abrupt depression in the earth's surface to set up the mill. The cane press is of iron and factory-made. It consists of a cog wheel about 20 inches in diameter which turns an axle that turns three heavy iron cylinders, each about 20 inches long and 10 inches in diameter, set up horizontally on four iron legs. Over the press and the pile of cane lying near it is a rude shelter which is open on all sides except the rear, where a wall, made of *taipa* has been erected. The roof is of tile, about 10 feet wide by 25 feet long, and slopes steeply from back to front.

At the side of the mill, the water falls from the trough onto the cleats of a heavy wooden wheel which revolves on its iron axle and turns the cog-wheel mentioned above. The water wheel is about 12 feet in diameter and 20 inches wide, and the cleats are placed every 10 inches or so around its circumference. Some 15 feet before it reaches the water wheel, the water passes a second *ladrão*, consisting of a trap door in the bed of the trough which can be opened to divert any water which may have escaped the control above, and thus force

¹⁷² See Dwellings and Furnishings, p. 42.

the water wheel, when desired, to come to a complete stop.

The cane is fed by hand into the press. The juice (*garapa*) falls into a wooden trough about 4 inches square which carries it some 60 feet or more, where it falls into a large wooden tank (*quartola*), placed inside the large farmhouse. The crushed stalks (*bagago*) are dropped beside the press until a considerable pile has accumulated and are then removed by hand.

When the operator is ready to turn the *garapa* into *pinga*, he dips the juice out of the wooden tank with a bucket and carries it to the *damas*, or large wooden vats, where he adds maize mash (*fermento de milho*) to the juice and leaves it to ferment. The degree of fermentation is measured by an instrument called the *décimo*. When it registers 15, which is ordinarily about 24 hours later, the fermented juice is dipped out of the *damas* and taken in buckets to the *alambique*.

The *alambique* is a round copper vessel entirely enclosed, about 5 feet in diameter and 5 feet high. From the upper part, an inverted funnel leads off and terminates in a copper coil which subsequently passes 10 times around the inside of the nearby *resfriadeira*, or condenser, a cylindrical tank, out of which it eventually protrudes in the form of a small spout. The condenser is made of cement and is about 3 feet in diameter and 8 feet high. Water is brought to it from about 60 feet away by means of a long wooden trough around 12 inches square which leads off the trough previously referred to.

When the fermented juice has been placed in the *alambique*, the latter is closed off tightly and a fire is lighted in a firebox below. The latter is of brick and measures about 6½ feet wide by an equal distance long and high. About 3 hours after the fermented juice commences to boil, vapor begins to enter the coils and to pass through the condenser and be precipitated as *pinga*. The liquid is then carried in small buckets and dumped into huge vats, each with a capacity of from 2,000 to 3,000 liters, or approximately 450 to 675 gallons, where it is left to "rest" several days, subsequent to which it is placed in large barrels and trucked directly to São Paulo, where it is sold at wholesale.

The still is able to handle daily about 250 gallons of cane juice which ordinarily produce around 30

gallons of *pinga*. During the month (February) in which this farm was visited, however, and also the previous month, the still had been in operation only part time, owing to a lack of both cane and water.

MAKING OF CHARCOAL

With the disappearance of the forest which once covered a considerable part of this region, the making of charcoal, formerly an important occupation, has declined until today it is rare to find anyone occupied with this task. An exception is a man working at present in the dense growth along the left bank of the Tietê River.

Timber is felled with an ax, a few square yards at a time, and a fire is set to consume the leaves, small twigs, and undergrowth and "to dry out the branches and logs enough for making charcoal." The wood is then chopped and split into pieces about 4½ to 5 feet long and not over 8 inches thick, for ready handling in the *caieira*.

To build a *caieira*, a space near the fallen timber, about 15 feet in diameter is first cleared and leveled. This is known as the *praça* (square). In the center of this cleared spot, sticks of wood are stood on end to form a rough cone. Rows of other sticks are placed around them until there is piled up "as much as the charcoal-maker has courage to tackle." Loose, dry dirt is then thrown over the pile to form a small mound, called the *balão* (balloon), like that to be seen in plate 8, c. Kindling, in the form of leaves and dry, soft, fibrous twigs, are then thrust in at the apex of the mound and set afire. When the fire has begun to burn well, the opening is covered over and a hole is made at the bottom of the mound to admit air and thus draw the fire slowly downward.

About a day later, when smoke no longer finds its way out and the wood is therefore known to be "well cooked," more dirt is piled on the mound and the wood is left to smolder for 3 more days. The dirt is then thrown to one side and the charcoal is taken out and sacked. The tools used in the entire process from timber to charcoal are only four: the ax, the *foice*, the shovel, and a wooden rake, with tines about 9 inches long.

A second process, in which a *forno* is substituted for the *caieira*, is also employed. A *forno* is made by digging a round pit about 6 feet deep and 9 to 10 feet in diameter. Advantage is taken of a sharp variation in ground level to cut a short trench

about 3 feet wide from the bottom of this excavation out to a spot where the charcoal maker can work on the same level as the pit floor. The pit is then roofed over with brick in the form of a dome. On the side immediately opposite the trench, an opening about 12 inches square, called the "chimney," is dug into the wall of the pit, from the bottom up to the top. Midway on each of the other two sides, at the top of the pit, small holes about 8 inches in diameter, called *baiãnas*, are cut.

Sticks of wood, beginning with the smaller pieces and ending with the larger, are then stood up around the sides of the *forno*, until it is filled, when a fire is set at the "door" by the trench. As soon as the fire is burning well, the "door" is closed with dirt and sealed completely by applying puddled earth to all spots where air might get in. By opening and closing the "chimney" and the "*baiãnas*," the amount of air to enter the *forno* is regulated, and combustion, or "cooking" as it is locally called, is thus controlled and forced to proceed slowly. When smoke no longer escapes from the *forno*, all outlets are closed off completely and the contents are left to smolder 3 more days, after which the *forno* is opened and the newly prepared charcoal removed with the aid of a wooden rake and sacked.

LUMBER

There is a small sawmill in the community, located on the *fazenda* that lies at the edge of the village. It is sheltered in a brick building, about 30 feet long, 20 feet wide, and 17 feet high. Mechanical power is taken off the turbine which also produces the electric power referred to elsewhere,¹⁷³ by means of a series of axles and belts, and made to operate either of two steel saws, one of which is rectangular and is set vertically and the other of which is circular. The former is a little over 3 feet long and the latter is about 20 inches in diameter. The machinery is placed underneath a board floor on which the sawing is done. Lumber of various sizes is produced from several different woods, including the *jacarandá*, *peróba*, *cedro*, *canêla*, *passuaré*, *guatambú*, and *piúva*.

VENDAS

The village has three *vendas*, or stores in which a variety of wares are sold, including alcoholic

drinks. Villagers and farmers ordinarily purchase needed items like salt, sugar, kerosene, and matches at one of these stores. Farmers living near the margin of the community may also make part of their necessary purchases in whichever of the three towns they happen to be nearest: Boa Vista, Piracema, or Paratinga. Even those living near the village, as well as villagers, purchase in one of these towns most of their farm implements and kitchen utensils which are factory-made, as well as most of the cloth to make the family's clothes and those remedies which are used, in addition to native herbs and magical means, in the treatment of illness.

The *vendas* in the village, however, are more readily accessible, and essentially contribute to the community's subsistence. One *venda* is owned and operated by a village leader, a *cafuso* widely known and respected in the community; a second, by the son of the tax collector; and the third, by the only Japanese in the village, together with his wife and family. As has been indicated, there are also two *botequins* where alcoholic and other drinks are sold, one of which has an extensive stock and is much patronized. Bread is now sold each day at the village bakery (as well as also in the *vendas* and the *botequins*). A beef is butchered on Friday afternoon, and the meat which is not distributed on the spot is sold during the remainder of the day or that evening in a small shop which otherwise remains closed during the week.

The *vendas* are open each day from early in the morning until as late in the evening as there are customers, which, on weekdays, is about 8 or 8:30 o'clock. The *botequins*, especially the principal one, may stay open until an hour or so later. Recently, for a brief period, the *vendas* were closed on Sundays by an order from the seat of the *município*. This action was thought arbitrary by both farmers and villagers, and indignant protests were lodged. "Now I have to lose a whole day's work," complained a farmer, "to go to the village on Saturday, just because I can't buy what I need when I'm there on Sunday." After 4 weeks the order was rescinded and the *vendas* reopened with special licenses to operate on Sundays.

The stock of any one store, although varied, is not large. Available in each of the three stores, for example, in June 1948, were only the following articles:

¹⁷³ See Fuel and Light, p. 48.

Cast-iron pans	Kerosene	Foodstuffs—Continued	Hardware:
Candlesticks	Bluing	Canned peas	Axes
Drinking glasses	Sewing-machine oil	Canned pears	Iron rings (for harness)
Brooms	Men's work shoes	Canned papaya	Locks
Irons (charcoal burning) ¹⁷⁴	Men's socks (cotton)	Canned oranges	Rope
Foodstuffs:	Hair ribbons	Cocoanut milk	Medical supplies:
Beans (bulk)	Elastic	Toddy	Quinine
Rice	Handkerchiefs	Cookies	Medicinal alcohol
Sugar	Brooches (plastic)	Confections: ¹⁷⁷	School supplies:
Salt	Nails	Peanut brittle	Pencils
Pepper	<i>Pacas de bainha</i> (sheath knives)	<i>Maria mole</i>	Pens
Lard	Alcoholic drinks:	<i>Cocada</i> (black, white)	Ink
<i>Rapadura</i> (bricks of crude brown sugar)	<i>Pinga</i>	<i>Doce de abóbora</i>	Erasers
Coffee	Beer	<i>Doce de leite</i>	Rulers
Codfish	Wine	Guava paste	Notebooks
Maize	Cognac	Quince paste	Satchels (imitation leather)
Onions	Vermouth	Banana paste	Clothing and personal effects:
Olives	Face powder	<i>Balas</i> (a hard candy)	Women's shoes (one pair seen)
Baking powder	Disinfectant (Creosote)		<i>Alpargatas</i> (rope-soled, canvas shoes)
Vinegar	Insecticide (D. D. T.)		<i>Tamancos</i> (wooden-soled shoes with leather or cloth toe)
Tomato extract			Sandals
			Slippers
			<i>Chuteiras</i> (shoes for soccer)
			Women's stockings (cotton)
			Straw hats (for women and children)
			Men's belts (plastic)
			Men's suspenders (plastic)
			Women's belts (plastic)
			Cotton cloth
			Buttons
			Shoe strings
			Small chain, with cross
			Small chain, with <i>figa</i> ¹⁷⁸
			Clothes hangers (wood)
Kitchen utensils:	Other household equipment and supplies—Con.		
Kettles (enamel, aluminum)	Chamber pots (enamel)		
Pans (enamel, aluminum)	Matches		
Skillets	Gasoline (occasionally)		
Wash basins (tin, aluminum)	Soap		
Ladles (tin, aluminum)	Sapolio		
Skimmers (tin)	Foodstuffs:		
Graters (tin, aluminum)	Potatoes		
	Macaroni		
	Maize flour		
	Bread		
	Condensed milk		
Other household equipment and supplies:	<i>Mortadela</i> (large sausage)		
Table knives, forks	Vegetable oil		
Plates (aluminum, china)	Garlic		
Cups (aluminum, china)	Canned fish:		
Saucers (china)	Sardines		
Candles	Catfish		
<i>Lamparinhas</i> ¹⁷⁶	<i>Corvina</i>		
Scissors	<i>Tainha</i>		
	<i>Savelha</i> ¹⁷⁴		
	Oat meal		

¹⁷⁴ See figure 6.

¹⁷⁵ Small lamps, made of tin or glass.

¹⁷⁶ The *corvina* (Sclaeinidae), the *tainha* (*Mugil platanus*), and the *savelha* (*Brevoortia tyrannus*) are all sea fish, native to the Brazilian coast.

Price information on most items would be of little value, since turn-over is limited, some articles remaining on hand for months or even years before being sold. The items listed in the table

¹⁷⁷ *Maria mole* is made of egg whites, sugar, and milk. *Cocada* and *doce de leite* are described elsewhere (see Food and Food Habits, p. 37).

¹⁷⁸ An image, often made from wood, of a fist with the thumb inserted between the index and middle fingers, and worn as a means of protection from the "evil eye."

¹⁷⁹ A small viola.

below, however, are purchased with regularity by families in the village and surrounding area. Even though certain of the food items are grown by several villages, as well as most farmers, crops in many cases are insufficient for the family's consumption during the entire year. The prices, at 6-month intervals in 1948, of the staples most purchased at village stores were as given in table 11.

TABLE 11.—*Prices of articles most often purchased at stores, village of Cruz das Almas, 1948*

Article	Price (in cruzeiros per kilo) ¹	
	January	July
Sugar.....	3.30	3.30
Coffee.....	12.00	11.00
Lard.....	24.00	24.00
Salt ²	1.00	1.00
Beans.....	3.00	5.00
Rice.....	5.50	5.00
Maize flour.....	4.00	3.50
Potatoes.....	2.50	3.00
Onions.....	2.30	3.50
Wheat bread ³	5.00	7.00
Matches (10 small boxes).....	2.40	3.00
Kerosene (liter).....	1.90	1.90
Laundry soap (bar).....	2.50	2.70
Brooms (each).....	13.00	13.00

¹ Unless otherwise specified.

² Of inferior quality.

³ During the period in which there was a scarcity of wheat flour in Brazil, rice and manioc flour were added in various quantities. This was true in January, but not in July, of 1948.

Sales are made for cash or on credit. The latter system is described in the section on Money, Credit, and Wages (p. 97). Transactions usually are carried on under conditions of primary contact, as described in the section on Making Purchases. A villager or farmer tends to trade consistently with one storekeeper, although on occasion he may buy from the others.

Even more than the church, the *vendas* are a means of contact with the world outside the family and immediate neighbors, being one of the principal points in the village at which groups of conversation habitually form. (See Conversation Groups, p. 112.)

TRANSPORTATION

Many farmers and their families walk into the village when they attend Mass and other religious or secular ceremonies, or wish to make purchases at a store or to visit friends. Some of these journeys on foot are made from as far away as 10 or 12 miles. Men and boys, but rarely women or girls,

occasionally ride in on a horse, mule, or burro, especially if they live a long way out and granted of course the family possesses one or more of these animals. The owner of the *fazenda* which lies at the edge of the village has had a truck for some time. Two men in the village, one of whom is engaged in hauling firewood from this farm to the railway and the other of whom works at the preparations for quarrying, each purchased trucks about 3 years ago, as also did one of the storekeepers during the past year.

Of 17 farms visited, the occupants of 6 say they always come to the village on foot; of 7, either on foot or on horseback; and of 4, either on foot, on horseback, or in a *charrete*. If the men ride in on horseback, sometimes with the children, the women usually walk (pl. 14, *a*) or remain at home.

A count of the means of transportation which was observed in the village on 4 consecutive days ¹⁵⁰ gave the following result:

	Wednesday	Thursday	Friday	Saturday
Horses.....	8	12	14	15
Mules.....	-----	7	9	7
Burros.....	1	1	1	1
Oxen.....	^a 4	-----	-----	^a 4
Trucks.....	1	1	1	1

^a A team.

The principal means for transporting heavy objects, as has been indicated, used to be the pack train and the oxcart. A farm woman recalls vividly an experience a few years ago when her household equipment was being transported over rather primitive roads from one farm to another within the community. "When we moved to this farm," she says, "we brought all our things in an oxcart. While we were crossing an *aterrado*, ¹⁵¹ part of it gave way and the cart tipped over. The glass doors of my cupboard were broken. Only one saucer escaped out of six and all the cups were smashed. The handles broke on the sugar bowl I'm still using. My pretty little salt dish was all in pieces. Just about everything we had either got broken or cracked in some way."

With the introduction of the truck about 20 years ago, however, these means of transport began to disappear. There are only two oxcarts at present in and about the village, although a few

¹⁵⁰ In June, 1948. The same truck was seen on each of the different days, as also were several of the animals.

¹⁵¹ A small culvert, made of logs and earth.

other farmers, each of whom lives in a quite isolated part of the community several miles away, still use this means of transportation. The pack train is now no longer to be seen. Produce, as has been indicated, may be carried in from the field by the farmer himself, or in *jacás* on the backs of horses, mules, or burros. The *carrinho*, which used to be pulled by goats to transport light articles, occasionally is still to be seen, pulled by hand (pl. 13, f).

A man in the village, 59 years old, vividly remembers the transition from pack train and oxcart to truck. He said:

From 1908 to 1927 I had a mule train here in the village. There were 19 mules. I drove them down to São José dos Patos and back and up to Piracema and back. I charged only 1 *milreis*, 200 *reis* a mule on the way over and 1 *milreis* back. Each mule carried 120 kilos. Once, when I was driving the train, I fell asleep on the back of a mule, I was so tired. I fell off on the ground and my companions laughed at me, but I got up and said it wasn't anything. The mules carried beans, maize, and potatoes. You should have seen how much went out of here in those days. It was a great life. Ê-ê-ê! There was a lot of everything!

Then, in 1927, the first truck appeared in these parts. Tonico (a farmer) bought it. He'd carry 25 sacks into São Paulo at 3 *milreis* a sack; on one trip alone, he'd make 75 *milreis*. A little later, the father of Bigodinho bought a truck and soon another man got one. Things changed a lot, then. The drivers of pack trains like myself, Gino, Chicão, and the father of Oracy and others who had earned their living driving mules, soon went out of business. And the oxcarts also began to disappear; first those with solid wheels, then the other kind. The bread man quit coming, too. I remember him well. He came from Boa Vista with two mules loaded with bread. He'd stop at the farm and sell us some and take in return eggs and chickens. He used to go all over the country selling his bread. Up to Piracema and far along the road to Itú.

The old road to Paratinga has become so overgrown with grass and weeds that traveling over it in recent years has been quite difficult for other than horsemen and oxcarts and, since May of 1948, when one of the log-and-earth culverts fell in, impossible. Work on the dirt road to Piracema, previously little more than a trail for oxcarts, which extended from March to October of 1946, materially improved this outlet to the outside world. In rainy weather, however, the steeper slopes are still quite difficult for loaded trucks to climb. The dirt road to Boa Vista, which is the most adequate in the community, recently has been

improved so that now it is readily traversable by motor vehicle except following a heavy rain, when slippery mud on steep hills sometimes makes traction almost impossible for heavy trucks. Other roads in the community are merely trails which branch off in different directions to reach the various farmhouses (pl. 1, c). In dry weather, however, they are traveled readily even by trucks. In places, all the old, unworked roads and trails run through cuts up to 10 feet deep, where the travel and erosion of many decades have cut the roadbed down below the level of the land on either side (pl. 1, f).

At São José dos Patos, one can take the train for São Paulo three times a day, once in the morning and twice in the afternoon. The ride into the city takes a little more than an hour. There is also a train in the other direction, to Sorocaba and cities farther to the west, once each morning and twice in the afternoon. If one goes to Boa Vista, a few miles further away on the rail line, he can take still other trains which do not stop at São José dos Patos. A bus line which offers transportation daily on a usually packed bus, each way from São Paulo to Itú, as has been indicated, passes through Piracema, 7 miles to the northeast of the village. Another bus line which offers daily transportation each way from São Paulo to Sorocaba, passes through Boa Vista, 11 miles to the south of the village. A plane from São Paulo to Curitiba flies over the area daily. Although no person in the community has yet been in an airplane, all the inhabitants are now familiar with the sight of one passing overhead. Its passage, however, especially at night, still continues to attract considerable attention.

The relative recency of these new means of transport is reflected in the attitudes of certain residents, especially among the older generation, living in the more isolated parts of the community. As an airplane passed overhead, for instance, a farm woman remarked:

They make *such* a noise. *Credo!* I'll never get in one! They go above the clouds. Even at night. They say they sometimes have accidents. The train also scares a person to pieces. They have wrecks and people die. I don't go anywhere except when I just have to. Even a truck is very dangerous. The roads are not safe, especially when it's raining. It gives you great fear. The last time I went, they used chains on the truck. I almost didn't stand it, I was so frightened."

At the time this study began, and for some time thereafter, researchers traveled to the village on horseback or in a *charrete* from the nearest station on the railway to the south. To travel the 9 miles of muddy road in rainy weather over steep hills took from 2 to 2½ hours. One could also continue on to the next stop on the rail line and from there, if fortunate, find a truck going over to the village or arrange a car at a high rental for the trip. At that time, there was no way to get to the village from the north unless one went by bus to Piracema and, by chance, found a truck going over from there. Remarkd a farm boy:

If you are like many people in the community and don't have a horse or a *charrete* when you have to travel, it's very difficult. You may be able to find someone who is going in a truck to São José dos Patos or Boa Vista; but when you want to come back, it may be raining and there is no truck to bring you. Either you have to walk in the mud or spend the night somewhere along the way. If you have a horse and you want to take a train, you have to put him in a pasture when you get to the railway. And then when you come back you have to go fetch him from the pasture and saddle him. It's a lot of trouble. What we've needed for a long time here is a bus line. No one in Boa Vista or Piracema takes any interest in putting in one because those towns already have their own. If we could go by bus, we wouldn't have all that bother we have now; all we'd have to do would be to arrange the money to pay for the ride. Some people don't think it would be so good, but most do; as for me, I think it would be a fine thing for this place.

Other local inhabitants for many years have felt the need to increase transportation facilities. Finally, at the initiative of a village leader who himself put up 20,000 *cruzeiros* and who convinced nine other persons to do likewise, some much-needed work was done on the road that runs through the village from Boa Vista on the south to Piracema on the northeast and, during the period while this study was in progress, a bus line was organized and two chassis purchased. The village leader is a former farmer, part-time carpenter, and present *sub-delegado*. The organization was called *Empresa Nossa Senhora da Penha* (Our Lady of Penha Enterprise), in honor of the principal *santo* in the village church. Unable to arrange in São Paulo, in the immediate future, the building of bodies for the chassis, due to heavy backlogs which had piled up during the war, the new company had them built in a town 120 miles to the north. The inauguration of the bus line was

of such importance that it was given ceremonial sanction. (See Isolation and Contact, p. 101.)

Passengers are carried and also farm produce, especially milk. Each morning farmers who sell milk leave their cans at the roadside to be loaded into the bus and delivered in Boa Vista. In the month of June 1948, according to one of the owners of the bus line, 7,444 liters of milk, from three farms, were delivered in Boa Vista. The charge is 20 *centavos* (about 1 cent) per liter, the bus line accepting no responsibility for loss on those days when heavy rain makes its operation impossible. "Around 350" liters of milk are carried daily to Piracema. An occasional basket of eggs or vegetables or a coop of chickens also are picked up.

The second bus is held in reserve for use in emergencies, should the first bus break down or travel become unusually heavy. It is also available for special occasions like that recently when pilgrims were carried to the shrine of Nossa Senhora da Aparecida in the northeastern corner of the State.

WEALTH AND PROPERTY

Wealth is almost entirely in such tangibles as land, houses, and other buildings, livestock, and personal belongings. The existence of stocks, bonds, insurance, and other intangible forms of wealth is unknown to a considerable portion of the inhabitants and so far as could be discovered no one in the community possesses these forms. A few farmers have money, usually in limited amounts, on deposit in the Boa Vista branch of the *Caixa Econômica*, an agency organized several years ago by the Federal Government, which pays 5 percent interest on deposits after 6 months, compounded semiannually. An occasional local inhabitant, including one of the village storekeepers, has purchased one or more *títulos de capitalização*. These are certificates issued by commercial firms in various amounts which pay various rates of interest and have the additional lure of being subject to a lottery drawing at stated periods, usually once a month, with sizable premiums.

Since neither silver nor gold coins have been in circulation in Brazil for many years, hoarding, if done, would have to be either in paper money, the depreciation of which is at present increasing, or in coins made of cheap alloys, which are almost equally valueless, so far as intrinsic worth is

concerned. One villager who owns several pieces of land is referred to by other villagers as a miser and is said to have money secreted about his house. Most villagers and farmers live too near the actual subsistence level to possess other than a meager supply of currency.

Land is the principal symbol of wealth and the desire to possess it is universal in the community. Of 15 *sítios* visited, 13 were owned by the occupant. Another farm was being rented from a relative who lives in the community. The remaining farm, composed of only 2.5 *alqueires* (15 acres), was being tended by a man given this privilege in return for overseeing the production of *pinga* at the *engenho* located on the farm. (See Distillation of Pinga, p. 89.) Of the 15 properties, 12 had been inherited by the present owner;¹⁸² 3 had been purchased.

All the land in the community presumably is registered on the tax rolls. The official records kept in the capital of the State, list 381 separate pieces of property held by 335 owners. These properties total 9,088 hectares (22,456 acres). The largest has 2,152 acres and is the only property owned in the community by this taxpayer; the smallest has 0.38 of a hectare (0.93 of an acre) and similarly is the only property owned in the community by this taxpayer. The average holding is 24.2 hectares (59.8 acres); the mode is 9.7 hectares (24 acres). Of these properties, 310, or 81.3 per cent, consist of less than 60 acres each.

The total value of these properties as carried on the tax rolls is 5,239,290 *cruzeiros*, which is equivalent to about US\$14.19 per acre. All but six properties are owned by individuals. One of the six, a farm of 3,701 acres, is owned by the State government. Another is held by a corporation which expects to exploit mineral wealth.¹⁸³ The remaining four properties are owned by three firms, one of which is located in Boa Vista and the other two in São Paulo. The five of these properties which are privately owned total only 624 hectares (approximately 1,543 acres).

Since, then, according to the official records, there are in all, including both the properties owned by individuals and those owned by firms, only 23,989 acres in the *distrito*, and the population

totals 2,723, the average acreage per person is about 8.8. The distribution of properties by size of holding is given in table 12.

TABLE 12.—Number and size of landholdings, *distrito* of Cruz das Almas, 1948¹

Size		Number	Percent
Hectares	Equivalent, in acres, of upper limit		
0-4	9.9	101	26.5
5-9	22.2	104	27.3
10-14	34.6	45	11.8
15-19	47.0	28	7.3
20-24	59.3	32	8.4
25-29	71.7	10	10.8
30-34	84.0	7	
35-39	96.4	11	3.2
40-44	108.7	5	
45-49	121.1	8	1.5
50-54	133.4	1	
55-59	145.8	0	3.2
60-64	158.1	7	
65-69	170.5	1	1.5
70-74	182.9	3	
75-79	195.2	0	3.2
80-84	207.6	3	
85-89	219.9	0	1.5
90-94	232.3	0	
95-99	244.6	3	3.2
107	264.1	1	
108	266.9	1	1.5
121	299.0	2	
130	321.2	1	3.2
183	452.2	1	
189	467.0	1	1.5
217	536.2	1	
242	598.0	1	3.2
256	632.6	1	
338	835.2	1	1.5
871	2,152.2	1	
Total		381	100.0

¹ Source: Tax records on file in the State capital. Not included is a property owned by the State, composed of 3,701 acres.

As has been indicated, all the farms in the community except four are known locally as *sítios*; these four are called *fazendas*. One of the latter is owned by the State government. Two others are owned by absentee landlords, each of whom lives in São Paulo and delegates the care of his property to an *administrador*. In the fourth case, the owner himself resides on the property and oversees the work on it.

The boundary lines of properties often used to be marked by *valos*, or deep ditches, some of which still exist (pl. 11, *i*).

Of the 73 houses in the village, 40 are owned by the families occupying them, 31 are rented, and 2 are used without charge by relatives of the owners. Many of the houses which are rented have been occupied for many years by the families now living in them. Rents range from 10 *cruzeiros* to 200 *cruzeiros* a month; the average is 46 *cruzeiros*.

¹⁸² In two cases, part of the present holding also had been purchased.

¹⁸³ See Preparation for Quarrying, p. 36.

A property owner rarely makes a will. A village official knows of only two wills having been drawn up in recent years, and one of these is no longer in force, since a clause in it prescribed that the sale of any part of the property would nullify the testament and a part of the property has since been sold. If an owner dies intestate, half of the property goes to the wife, if she survives, and half is divided equally among the children.

The practice of primogeniture is absent in this culture. The ordinarily high reproductive rate has thus resulted in extensive subdivision of landed estates, a process which already has reduced materially the size of holdings in the community and is continuing, with each succeeding generation, to reduce them still more. A large farm of 770 *alqueires* (4,420 acres) was divided sometime ago between seven heirs, so that each owner now has 110 *alqueires* (656 acres). A farm which 50 years ago contained 400 *alqueires* (2,388 acres)¹⁸⁴ has now been broken up into 42 separate properties. Another farm of 60 *alqueires* (360 acres) was recently divided equally among six children so that each possesses only 10 *alqueires* (60 acres). A farm of 12 *alqueires* (72 acres) recently was divided among four heirs, so that each now has about 18 acres. In three generations, a farm of 120 *alqueires* (720 acres) has been subdivided until an heir who died recently left only $11\frac{1}{2}$ *alqueires* (9 acres) to be divided among six children. "Before long," remarked a villager, humorously, "these farms won't be large enough for an ox to lie down on, unless his tail hangs over."

The recent purchase of two busses (see Transportation, p. 95) was made by 10 local men, each of whom put into the enterprise 20,000 *cruzeiros* (\$1,100). Two of the men are storekeepers, another is a retired farmer and present *sub-delegado* and part-time carpenter, four others are farmers, one is the overseer of the *olaria*, or establishment for making bricks, another is a politician now living in Boa Vista who grew up in the community, and the tenth is a farmer's son who owns and drives a truck.

MONEY, CREDIT, AND WAGES

As far as contact with the outer world is concerned, the inhabitants of the community participate entirely in a money economy. Payment for

farm produce that goes to the city is in money, as also is that for the few articles of clothing and the tools and other equipment which the farmer or villager buys in neighboring towns. Inside the community, barter still continues to some extent. Farmers occasionally exchange produce among themselves. At least part of their accounts at village stores may be settled in kind. As has been indicated, most of the payment for the grinding of maize at either of the two mills is made in by-products of the preparation of maize flour. Labor on farms is often paid for, in part, with farm produce for the laborer's family. A village girl who helps take care of the house on the *fazenda* at the edge of the village, is paid in food and clothing for herself and invalid mother. At the same time, the money economy of the outer world invades continually more and more even local transactions. Most purchases at village stores are paid for in currency, as are, almost without exception, drinks at the village *botequins*. When buying and selling among themselves, farmers ordinarily use money. The salaries of village officials and the two teachers are received and taxes are paid in money, as also are fares on the newly established bus line. Payment for labor or other services almost always is made in money.

Credit often is extended to farmers and villagers for purchases at village stores. One storekeeper, for instance, estimates that 60 percent of his sales are on credit and the owner of the bakery estimates that "less than half" of his sales are for cash. Without capital of their own or means of arranging credit elsewhere, most farmers are dependent upon this system to supply the needs of their families during the months while a crop is growing. At harvest time, the farmer may settle his account with the storekeeper in cash after selling his produce elsewhere or, as has been indicated, he may deliver a quantity of produce which, at the local price, equals the amount owed for the year. "When I first came here," remarked a farmer, "Seu Sebastião (a storekeeper) agreed to let me have credit at his store. I don't know what I would have done without it. I have just sold a crop of onions for 7 *contos*¹⁸⁵ and paid the 4 *contos*

¹⁸⁴ This farm was at that time bought for 6,000 *milreis*.

¹⁸⁵ Previous to the substitution, in 1942, of the *milreis* by the *cruzeiro*, the term *conto* was used to refer to 1,000 *milreis*; in popular speech, the term has since been transferred to 1,000 *cruzeiros*.

I owed for the year. You appreciate being treated like that."

In recent years, the inflation in Brazil has increased the need of local farmers, most of whom live on a bare subsistence level, for credit, not only to supply their families until a crop is harvested but also to purchase seed and such fertilizer and machinery as they may use. "Farming is grand," said a young man, "but what we need is credit." "This land is nearly worn out," said another farmer. "I was thinking of using some fertilizer on it. But it costs 95 *cruzeiros* a sack and I just haven't got the money." In emergencies, storekeepers sometimes not only extend credit to customers for purchases in their stores, but also lend them small sums.

In a community where contacts are primary and everyone knows everyone else intimately, both the difficulty on the part of the farmer to arrange a limited amount of credit and the possibility of loss on the part of the storekeeper are minimal. At the same time, owing to crop failure or other misfortune, accounts may be carried on the books for years. When the bakery was sold recently, outstanding debts totaled 6,000 *cruzeiros* (\$330). One of the storekeepers says that he is carrying at present "close to 100 *contos*" (\$5,500) on his books.

At the same time, an effort is beginning to be made in the village to limit the amount of credit extended. On a board hanging from the wall of the principal *botequim*, there are painted the words *vendo só a dinheiro* (I sell only for cash). Nearby is tacked a piece of paper on which is printed, in pencil, in large letters, the following verse:

O fiado me dá penas
As penas me dão cuidado
Para aliviar-me penas
Não posso vender fiado.

(Credit brings me worry
My worries cause me pain;
To relieve myself of worry
I do not sell on credit.)

A similar verse has recently been hung on the wall at the bakery. These efforts, however, seem to be only half-hearted. The owner of the *botequim*, for instance, estimates that about a third of his sales are still on credit.

The total amount of wages or salaries paid during any one month to persons living in the village

and surrounding area is relatively small. At the same time, a few employments are remunerated in this way. At present (July 1948), the wages being paid in the community for services are as follows:

	<i>Cruzeiros</i>
Washing clothes, ¹ per dozen pieces.....	3
Sewing:	
To make a cotton dress.....	5-10
To make a silk dress.....	15
To make a pair of trousers.....	8-10
To make a man's or boy's coat.....	15
Doing housework (1 person), per month.....	100
Working in the fields:	
Per <i>tarefa</i> ²	20-25
Per day, with food.....	10-12
Per day, without food.....	22-25
Cutting and piling firewood, per cubic meter.....	8
Working on the roads, per day.....	25
Shoeing horses, four horseshoes (13 <i>cruzeiros</i> to cover the cost of shoes).....	25
Making brick:	
Filling <i>picador</i> , per thousand bricks ³	30
Mixing clay in <i>picador</i> and <i>pipa</i> , per thousand bricks.....	15
Molding bricks, per thousand bricks.....	24
Hauling bricks to kiln in wheelbarrow, per thousand bricks.....	6
Taking care of kiln, per day (or night).....	30
Removing bricks from kiln and hauling away in wheelbarrow, per thousand bricks.....	8
Laying brick.....	By the job, (<i>empreitada</i>).
Doing carpenter work.....	By the job.
Calcinining.....	By the job.
Helping in a store:	
1 boy, per month.....	250
1 boy, per month, with food.....	180
1 boy, per month, with food.....	120
Driving a truck, per month.....	1,000
Helping load and unload a truck:	
1 person, per month, with food.....	200
1 person, per day, with food.....	5
Driving the new bus (1 person), per month.....	1,500
Collecting bus fares, ⁴ (1 person) per month, with food.....	500
Preparing a quarry for operation, per day ⁵	20-24

¹ Since specialization rarely has developed to the point where any one person spends all his working time at any one employment, listings are by type of work done rather than by occupation.

² See Glossary.

³ From 1,000 to 1,100 bricks is considered an average day's work.

⁴ This person also handles milk cans picked up along the route and otherwise assists the driver of the bus.

⁵ Depending on the type of work.

Cruzeiros

Overseeing preparations to put this quarry in operation (2 persons), per hour----- 5

A few persons draw regular salaries. They are as follows:

Cruzeiros per month

Tax collector-----	2,760
Teacher (1)-----	1,700
Teacher (1)-----	1,300
<i>Soldado</i> ² -----	1,056
Manager of <i>olaria</i> -----	1,000
Manager of new bus line-----	900
Mail carrier ⁴ -----	869
<i>Fiscal</i> of the <i>Prefeitura</i> ² -----	850
Postmistress-----	800
Gravedigger-----	450
Supervisor of road work-----	450

¹ A raise in salary is anticipated shortly, since this teacher will soon have completed 15 years of teaching at which time the salary will automatically be increased.

² See Division of Labor, pp. 59, 60.

³ Plus commission.

⁴ Work consists in carrying mail on foot to and from São José dos Patos on the railroad 9 miles away. See Division of Labor, p. 58.

Only one person, the *escrivão de paz*, or registrar of vital statistics, makes his living from fees, although two other individuals occasionally are paid in this way: the *juiz de paz* receives 5 *cruzeiros* per marriage¹⁸⁶ and the *curador*¹⁸⁷ of marriages, 2 *cruzeiros*. The income of the *escrivão* has varied in recent years from 370 to 1,000 *cruzeiros* per month.

The *sub-prefeito* and the *sub-delegado*¹⁸⁸ serve without salary, as do the *padre*, the sacristan, the acolytes, and the patronesses, although, on the occasion of a religious festival, those in charge will give the sacristan 20 *cruzeiros* or so for his care of the church and the *padre* will give each of the acolytes a small sum out of the funds obtained for the festival. The woman who washes the vestments and altar cloths on these occasions may also be given from 20 to 40 *cruzeiros*. The midwife may be paid up to 40 or 50 *cruzeiros* for a delivery or receive remuneration in kind. In cases of extreme poverty, she may forego payment. "When I see they can't afford it," says the midwife, "I tell them it doesn't matter, I'll help them anyway."

¹⁸⁶ For performing the civil marriage ceremony.

¹⁸⁷ An official who checks the documents made out on the occasion of a marriage ceremony.

¹⁸⁸ See Division of Labor, p. 59.

Boys occasionally are hired for farm work at 7 *cruzeiros* a day, without food, or 4 *cruzeiros*, with food. To pick up potatoes, women and children are paid 6 *cruzeiros* a sack of 60 kilos (132 pounds). Two men who assist with the running of a mill to grind maize are paid, respectively, 500 and 400 *cruzeiros* per month and each is furnished a house for his family. The woman who "toasts" maize flour in this mill receives 60 centavos (0.60 *cruzeiro*) per kilo. The part-time barbers charge 3½ *cruzeiros* for a haircut and 1½ *cruzeiros* for a shave; the charge for the two services together is 4½ *cruzeiros*.

Farm labor used always to be hired, and still is to a considerable extent, by the *tarrafa*, or task. So much is this so that many farmers still measure land in *tarefas*, and the *braças* of which the *tarrafa* is composed. Apparently this measurement, as has been indicated, originally was the amount of land a person could work in a day. In the phrase *trabalho por tarefa* (working by the *tarefa*), the term became generalized also to refer to a certain quantity of wood cut or a certain number of trips made by the driver of an oxcart or mule train. A man working long hours or at a rapid rate obviously may complete in a day more than a *tarefa*. Farmers much prefer to hire by this system. As one farmer said, "I won't hire a man by the day, because then he will kill so much time that the day is over before he's gotten much done."¹⁸⁹

Land in the community, with improvements, is selling at present for from 1,000 to 3,000 *cruzeiros* per *alqueire*, or about \$9.20 to \$27.50 per acre. A farm of 13 *alqueires*, with a small house, recently sold for 37,000 *cruzeiros* and another of 9 *alqueires*, also with a small house, for 22,000 *cruzeiros*. Payment for land and other properties is made either in cash or by promissory note. A farmer with 90 *alqueires* (about 540 acres) of land paid 470 *cruzeiros* land tax last year. Other tax payments were proportionately about the same. The land tax has since been increased 100 percent.

The only *sítio* being rented, among 15 visited, was leased at an annual rate of 337.50 *cruzeiros* for the 1.5 *alqueires*, or about 9 acres. This is equiva-

¹⁸⁹ The owner of a *fazenda* who pays by the *alqueire* to clear brush off land to be put to pasture complains that although in 1941 he paid only 40 *cruzeiros* per *alqueire*, he now has to pay "from 180 to 200 *cruzeiros*."

lent to approximately \$2.06 an acre. Cash rentals, however, are relatively rare, most farms which are rented being leased for a fourth, third, or half the crop, depending upon whether the owner furnishes seed, a house, and other considerations and pays for the plowing.

Milk is being sold in the community at present (1948) for 1.55 *cruzeiros* a liter and in Boa Vista at 2.50 *cruzeiros* a liter. The price of firewood delivered to the rail line at present is 65 to 70 *cruzeiros* a cubic meter. One man, however, has a contract of several years standing with the railroad company to furnish a large quantity of firewood at 55 *cruzeiros* a cubic meter. The prices of the principal agricultural products have been given in the section on Decline of Agriculture (p. 71) and the prices of the principal items purchased at the village stores, in the section on Vendas (p. 93).

The difference between prices today and prices some years ago is a recurrent subject in the conversation of local residents. "The *tempos de dantes*,"¹⁹⁰ remarked an elderly farm woman, "were much better. You got little for your produce in those days but it was enough to buy everything you needed because everything was so cheap." Remarked a 70-year-old villager:

When I was a young man, around fifty years or so ago, times were much better than they are today. Everything costs so much now that it seems like—God forgive me—a punishment has been sent upon us. I once

¹⁹⁰ Literally, "the times of before;" that is, "formerly."

sold a pig weighing 5 *arrobas*¹⁹¹ for 20 *milreis*. I sold sacks of beans, sacks of a hundred liters, and delivered them in São Paulo for a little over a *milreis* a sack. I paid all the expenses of getting them there. Today, a hundred-liter sack of good *roxinho* beans costs 300 in São Paulo. Even a sack of ordinary beans costs 200. We used to get a 60-kilo sack of *carolinho* rice for 9 *milreis*; today, you can hardly buy the empty sack for that price. Codfish used to be 500 *reis* a kilo; only 100 *reis* would buy enough for a meal. As God is in heaven and I am on earth, this is the truth.

Remarked another villager:

Forty years ago, when I was a young man, I remember selling an *arroba* of pork for 9 *milreis* and chickens at 1 *milreis*, 200 *reis* each. Maize was very cheap, too; only 2 *milreis* an *alqueire* [50 liters]. You could buy a steer to butcher for 60 *milreis*; today, they sell for 1,000. You could buy a young burro for 25 *milreis*, or a full-grown one for 130; today they are selling for 4,000 to 5,000.

Land at that time wasn't worth much. Almost no one wanted to buy it. If someone did, he could get it for 10 *milreis* an *alqueire* [about 6 acres]. One of my neighbors sold a farm at that time for 3,500 *milreis*; today it is worth 55,000. The *fazenda* here by the village was put up at auction and sold for 8,000 *milreis*; the other day, the man in São Paulo who owns it was offered 1,000,000 for it, but he wouldn't sell.

I built that little house up the street. The bricks cost me only 25 *milreis* a thousand; large bricks, well-baked and made of real clay, not just of dirt like many bricks you get nowadays. They weighed three times as much as the bricks they put out now; and still you have to pay today 500 to 600 a thousand.

Once when I was a boy, I had 1 *milreis*, 200 *reis*. My brother-in-law found it out and wanted to whip me; he thought I had stolen it. In those days, that was a lot of money!"

¹⁹¹ 32 pounds.

SOCIETY AND CULTURE

Consideration has been given to the three primary elements of the local community: the population group, the habitat, and the ways in which this population group has accommodated itself to its habitat so as to obtain the satisfaction of basic needs.

Attention will now be given to the conditions and forms of association and the concerted activity in which these forms are revealed, as well as to the common meanings and common expectations of behavior which channelize and to a considerable extent determine this activity. Of primary consideration will be the interaction of local indi-

viduals, which is the mechanism of concerted action (or, in other words, of the *society*) and which proceeds in keeping with common meanings and common expectations (or, in other words, in keeping with the *culture*); while, at the same time, it is also the means by which these common meanings and expectations are renewed, as they are handed on from one generation to the next, and changed, either during this process or otherwise. These two complementary aspects of human life are so intricately related—concerted activity being not only determined to a considerable extent by cultural forms but also the means by which new

forms emerge and old forms change—that these two elements of the local situation may, with advantage, be considered together.

ISOLATION AND CONTACT

The principal contact with the outside world used to be by way of the *tropeiros* who lived in the village and drove *tropas* to nearby towns, or to São Paulo or Santos, or made long journeys west and south to purchase horses, mules, or burros to be driven to other parts of the State and sold. A few of the experiences of one of these men have already been cited. (See Transportation, p. 94.) An older man in the village recalls similar experiences:

When I was a boy, I lived in the village with my grandfather. He often let *tropeiros* stay overnight at his house. One of them took a liking to me. When I was 16 years old, I too became a *tropeiro*.

There are two kinds of *tropas*: The "loose" *tropa* and the "saddled" *tropa*. The "loose" *tropa* is a bunch of horses, mules, or burros which is driven some place to be sold. The "saddled" *tropa* is a pack train. I always drove a "loose" *tropa*. In the first bunch, there were 64 animals. I bought them in Itapetininga and sold them in Cabreúva, Jundiá, Campinas, Araras, and Limeira. Later, I sold animals also in Bragança, Amparo, and Pirassununga. I made friends with many dealers and they gave me credit. Sometimes I was able to buy as many as a hundred head at a time.

Without a *tropa*, I could make the trip to Itapetininga on horseback in 3 days, traveling about 10 *leguas* a day. It took 8 or 10 days to come back with the *tropa*. It was easy to find a place to spend the night. Sometimes we would stop in a town, but most of the time we stayed at farmhouses. A few times we had to pitch a tent. Some of my trips lasted more than 30 days. On every one I took two or three pack animals of my own which carried food, a tent, and everything else I needed. I also had along an assistant, a *peão*, a man who could handle any burro, no matter how wild he might be. There was also a boy with us. We carried many messages. Sometimes people gave us letters in sealed envelopes to deliver along the way.

At that time, there were four other *tropeiros* living in the village who drove "loose" *tropas*. Five other men had pack trains with which they hauled stuff from the nearest point on the railroad. My father had a pack train. He owned a store in the village. He would go to Santos to get stuff and bring it all the way here. At that time, the Government kept up the road for *tropas* and oxcarts from Santos to Itú. Burros took cotton to São Paulo in 3 days. Each burro carried two sacks and the price was 1 *milreis* and 500 *reis* a burro per day. Many *tropeiros* sang as they went along. I also sang but I don't remember the songs any more.

As has been indicated, mobility is still relatively low.¹⁹² Although the city of São Paulo is only 2 or 3 hours away by truck and a railway passes a few miles to the south and "through" roads run a few miles to either side of the community, contact with the outside world is still quite limited. The members of the community consequently live a rather self-contained and integrated life with little intrusion from the outside. At the same time, there is some contact with the outer world by way of occasional visits to neighboring towns and, more rarely, to São Paulo; by way of a few persons who have visited briefly other communities or remained away a few months or years before returning; by way of new residents who from time to time have moved into the community from other parts of the State or, in a few cases, from other parts of Brazil or from other countries; by way of pilgrims passing through on their way to the shrine at Pirapora (see Romarias, p. 175); and, to a limited extent, by way of letters, the printed page, and the radio.

Of the persons living on 17 farms visited, as has been indicated, few have ever been to São Paulo. One woman, 38 years old, has been there twice in her lifetime. "São Paulo is too crowded," she says. "You get dizzy from it all. Us folks from the country like it quieter." One family spent a night in São Paulo while moving to the community from Minas Gerais. A grandmother recalls her father taking her to the city when she was a small girl; her 31-year-old daughter-in-law, who lives in the same house, has never been there. One man, 37 years old, has been to São Paulo four times. The midwife goes there "once in a while," when she is unable longer "to resist the pleading of my relatives"; but, she says, "I go one day and come back the next. I lose my appetite there. I can't stand the city." One man interviewed visits São Paulo "almost every year."

Most of the farmers and a few of their wives occasionally visit one or more of the nearby towns, like Boa Vista, Piracema, and Paratinga, each quite rural in character, with a population of from 900 to 5,000, and more infrequently someone visits briefly a similar town somewhat further away. Many men and most women, however, visit only their relatives, *compadres*,¹⁹³ and other acquaint-

¹⁹² See Mobility, p. 27.

¹⁹³ See *Compadrio*, p. 142.

ances in the immediate neighborhood. One housewife says, "I never go out except to visit my sister who lives right near here. Once in a while I also go to see my *comadre*." Another woman, who lives only about 2 miles from the village, says, "I almost never leave the farm. It's 4 years now since I've been to the village." A third woman, who occasionally visits her sister in Piracema, says, "I never go on a day of *feira* because she rents out her house then and there wouldn't be room. Mostly, I visit my married children (who live on the same farm). I hardly ever go further. I don't need to, with all my children and grandchildren." Another woman says, "Sometimes on Sunday I go to see one of my *comadres* who lives near here. I have lots of *comadres*. I go see one of them one Sunday and if another complains that I haven't been to see her, I go see her the next Sunday. Sometimes people come to our house in the evening; but only men. They come to talk and play *truco* (a card game) with my husband."

In many cases, knowledge of other parts of the world, including Brazil, does not exist or is vague and inaccurate. One of the most able women in the village, for instance, a woman who had heard of the northern States of Alagoas, Sergipe, and Ceará because persons from each of these States have come to live in the village, once asked if Amazonas was in Brazil. When her husband, one of the best informed men in the village, replied in the affirmative, she inquired if Buenos Aires were in Brazil. A person present then asked if the United States were in Brazil. Several men and an occasional woman, however, are better informed.

As has been indicated, contact with the outside world through letters or the printed page is possible almost daily by way of the village postal station. Each day of the week except Monday, during the past 25 years, John-the-Letter-Carrier has brought the mail to the village from the nearest point on the rail line, usually on foot, over a rather precarious road, with a punctuality that is legend in the community.

The extent of this contact, however, is quite limited. During the month of March 1947, for instance, John-the-Letter-Carrier brought 169 letters to the village and took 148 out, or an average of about 5.5 and 5 letters, respectively, each day. A considerable portion of the correspondence was

of official character, received or sent out by one or the other of the village officials. Almost all the other letters were received or sent by village officials, the storekeepers, or the teachers, the receiving or sending of a letter by another villager or a farmer being a rare occurrence. There is no mail delivery within the village or to the farms.

Twenty-nine items of printed matter were received during the month, all of which were questionnaires or similar forms sent to the tax collector, the village registrar, or the *fiscal da prefeitura*, and 30 similar items were sent out. No registered letters were received or sent during the month.¹⁹⁴

Of six young men, aged 15 to 19, who were asked how many letters each had received during his lifetime, two replied that they had received none; one that he had received two letters and the other three young men that they had received three letters each. The two letters received by one of these young men had been sent by his father and an uncle. One of the three young men who had received three letters each had heard from an aunt, a godmother, and a friend of about his own age; another had heard three times from an uncle; and the third young man had heard from three friends, one in a nearby town, one in a State to the west of São Paulo, and the third in Rio de Janeiro.

The tax collector and the registrar of vital statistics also received regularly the *Diário Oficial*, a Government publication in which all laws, regulations, decrees, and similar pronouncements are officially published. Two persons, a storekeeper and the administrator of the *fazenda* that lies at the edge of the village, receive *O Estado de São Paulo*, a daily newspaper printed in the capital city; and four other persons, a second storekeeper, the village registrar, the baker, and a school teacher, receive regularly *O Diário de São Paulo*, another daily newspaper printed in the city. The copies that go to the storekeepers, however, are used more for wrapping articles purchased at the stores, than for reading. No magazines or similar publications are received.

¹⁹⁴ Five of the letters sent and three of those received during the month were *com valor declarado* (with a declared value) and carried currency, in keeping with a service whose purpose is similar to that of the post-office money order in the United States. The total amount of money involved was 1,223 *crúzeiros* in the three incoming letters and 1,538 *crúzeiros* in the five letters sent out, or approximately \$66 and \$83, respectively.

There is only one radio in the village, purchased about 2 years ago.¹⁹⁵ It will be recalled that this man's house is one of the two in the village which is supplied with electricity from a small motor turned by water power on the *fazenda* lying at the edge of the village. The radio is used principally on the occasions of a broadcast of a game of *futebol* (soccer) in São Paulo, at which time several village men and boys may come in to listen.

A few of the men have had to leave the community for several months to undergo military training. At the age of 18, all young men in Brazil, unless physically incapacitated, become subject to this service. Those actually engaged in farming are exempt, so that the number of young men who have been away for this reason is small. Training usually is in the city of São Paulo, but may be elsewhere in the State. In only one case known, has a young man failed to return to the community when the period of service was over. All the others, however, have returned much changed. "They come back more active," said a villager, "more wide awake." As a school teacher put it, "They return more civilized." Occasionally, a young man comes back no longer satisfied with life in the community. After spending 13 months in military training, a young man, for instance, whose mother is a widow, recently returned and is at present engaged in cutting wood on a neighbor's farm. "I'd like to get a job in the city and get away from all this," he says. "Cutting wood is too hard work. If it hadn't been for my mother and my brothers and sisters, I'd have stayed in the army. It was much better there."

The lack of communication in the region gave rise to an expectation which came to be laid upon all who traveled out of their communities to carry messages and parcels which the need of a neighbor or acquaintance required. Anyone who had occasion to go to a nearby town would, upon departing, ask any of his friends or neighbors whom he met, "*Qué arguma soisa de lá?*" (Can I bring your anything from there?). In the course of this study, for example, research personnel rarely left the village without at least one *encomenda* (errand) for some villager or farmer. Included were requests

to purchase fishing equipment, a gasoline pressure lamp, a Winchester rifle, a shotgun, parts for a kerosene lantern, and playing cards; earrings were taken to the city to be repaired and a dress for a woman who had been hurriedly taken to a hospital was delivered.

When, some years ago, trucks began to operate in the region, their drivers, being more or less "permanent travelers," came to play, like the *tropeiros* before them, an important role in communication. In areas like this, where contacts were primary and means of communication few, the driver of a truck was expected to be not only a competent chauffeur but also a willing and efficient courier, with a memory cultivated for *encomendas*. Even today, when mail comes regularly into the village, truck drivers on almost all trips out of the community carry letters, oral messages, or parcels which they deliver directly to the person in question. The replies or parcels brought back are sometimes left at a village store until the villager or farmer comes in and asks, "Did the driver of the truck leave something for me?"

Since contact with the world outside the community so far has been quite limited and most of that which has occurred has been with persons in nearby rural neighborhoods and small towns whose way of life is similar, comparatively little strain for consistency has been injected into the local mores. Even the foreigners, or children of foreigners, who have come to live in the community have been too few in number and their coming has been spread over too long a period of time and the local society and culture have been too resistant, to alter appreciably the character of the local situation. Like the Japanese storekeeper and his wife, incoming individuals have been rather readily assimilated and the diverse attitudes, sentiments, and points of view which they may have brought with them have been filtered out of the common life rather than admitted into it.

The rather general condition of isolation, both geographic and cultural, has not only made for solidity in the mores but the consequent absence of Alternatives of behavior for the individual has at the same time increased that solidity and worked against personal individualization and disorganization. Folk ideas regarding natural phenomena, including means of magical character for dealing with sickness and its cure, tend to prevail in the

¹⁹⁵ Since this was written, one of the storekeepers has purchased and installed in his store a cheap radio operated by batteries.

community. Belief in such phenomena as *assombrações* and the action of other mysterious beings and forces, has a strong grip upon the perception and the imagination of all local persons. As will be evident in the account that follows, elements of folk belief and attitude still permeate other aspects of the communal life. The resolution of practical problems by way of traditional techniques handed down from fathers and grandfathers, all of which were in keeping with conventional ideas, attitudes, and beliefs, has made it unnecessary to call out latent abilities and to sharpen and develop intellectual functions. At the same time, this relative lack of problems implies a relative lack of frustration and a satisfaction with the daily round of life which is accompanied by a larger measure of personal happiness than one ordinarily finds where society and culture are in flux.

These remarks describe the prevailing situation. Like most generalizations, however, they require certain qualification. Contact with the world outside the community, although limited, apparently has always occurred to some extent. From this community, as has been indicated, set out and (usually) returned *bandeirante* leaders, with their retainers and Indian and (occasionally) African servants and slaves. Other Indians sometimes were brought back and settled in the community. There has always been some moving into the area of persons and families from nearby rural communities. The several *tropeiros* who once operated out of the village, a few of whom are still living, must have brought in from the outside world at least a few novel ideas, attitudes, and points of view. Contact with other persons within the community, especially on the part of those living in the village, has been relatively constant and intense. Few of the local inhabitants are dull or stolid. On the contrary, there are a number of persons whose mental alertness is of a highly developed character. This keenness of mind, however, tends to spend itself in prolonged and eminently satisfying conversation—the *prosa* as it is called locally—rather than in attacking systematically and effectively the problems that are now, especially with the impingement of the metropolitan market upon the community, beginning to emerge (see, for example, *Decline of Agriculture*, p. 71). Some skepticism has appeared and would

seem to be growing. There is also an occasional case of personal disorganization. (See *Social Disorganization*, p. 218.)

The inauguration of bus transportation, which occurred during the period in which the community was under observation,¹⁹⁶ obviously will considerably increase contact with the outside world. As has been indicated, this occurrence was the culmination of an effort on the part of a village leader who little by little had convinced several other men to join him in the undertaking. Most of the local inhabitants had been quite skeptical of any positive result ever coming from these efforts. They recalled several times in the past when they had been disillusioned with reference to similar hopes as the preelection promises of politicians produced nothing tangible. Remarks like the following were commonly heard: "They say a *jardineira*¹⁹⁷ will come here; if it does, it will be well. But *quá!* it's only talk."

The energy and persistence of this village leader, however, gradually dispelled doubts. As each new associate agreed to join him, or other step in the enterprise actually was taken, his comments to villagers were in such tones of positive conviction that there began to develop a rather general interest in the undertaking and this interest eventually grew to the point where it came largely to dominate the thinking and conversation of local inhabitants. What had begun as the initiative of an individual in response to a felt need, now began to take on at least something of the character of a collective act. Individual attitudes toward the undertaking became shared attitudes. In spite of an approaching election and the absorption in politics to which the local inhabitants ordinarily become subjected at such times,¹⁹⁸ the "coming of the *jardineira*," as it was called, became a subject of conversation, even more than the candidates for public office, every time a villager or farmer met an acquaintance. "We used to get all excited over elections," remarked a farmer, "but we're learning that you can't get a shirt from politics. The *grandos* (big shots) remember us on the day before election, but that's the only time they ever think of us. If we hadn't made an effort ourselves, if it hadn't been for us arranging the money and fixing up

¹⁹⁶ See *Transportation*, p. 95; also plate 14, c.

¹⁹⁷ Colloquial expression for "bus."

¹⁹⁸ See *Political Behavior*, p. 184.

the road, when do you think we ever would have gotten this far toward having a *jardineira*?" "Now things are beginning to change," remarked a villager. "People are opening their eyes. We've voted for this man and for that and we've been kept waiting and hoping, and nothing more. All it's amounted to has been that *seguramo a cabra pros ôtro mamá* (we have held the goat for others to suck)."

The importance of the inauguration of the new bus line was reflected in the ceremonial sanction given it. The date of the first trip was set for October 19. On the morning of that day, the bus set out, with a band, from the neighboring town of Boa Vista. As soon as it was seen coming on the road outside the village, the church bells began to ring and rockets were set off as on a day of *feita*. An enthusiastic crowd of villagers and farmers had already gathered in the village square. When the bus pulled up, the members of the band got out and played several marches. Then, accompanied by the crowd, at whose head were the *padre* and two acolytes, one of the latter of which carried a vessel with holy water and the other the aspergill, the band escorted the bus to a point at the edge of the village where a school teacher had strung up across the road leading out to Piracema a green and yellow¹⁹⁹ ribbon. The band then played another march, after which the *padre* took the aspergill and sprinkled holy water over the hood, the door, and the interior of the bus. He then read a passage from the prayer book and turned to the crowd and said, "I am greatly pleased to perform this ceremony. You, my friends, are to be congratulated upon this great achievement. From the bottom of my heart, I offer a most sincere prayer that this step of progress, this giant step, will be for the good of all. I now cut this green and yellow ribbon which closes off the way of progress. Surely the way of progress will always remain open, by the will of God, for my friends in the village and in all the *município*." The *padre* then cut the ribbon with a pair of scissors, after which several women and girls took the two pieces and placed one to either side of the bus so as to make it appear that the bus itself, in its passage, had broken the ribbon. The school teacher then called for a *Viva!* in honor of the *Empresa Nossa Senhora da Penha* (Our Lady of Penha Enterprise),

the name of the local company which had been formed to operate the bus, to which the people responded with enthusiasm, followed by a second *Viva!* for the men who had formed the company and a third for "the people of the village."

The members of the band and as many other persons as could crowd inside then got into the bus and it was driven to a spot in front of the church, where the band played another march; after which, followed by seven trucks, filled with other villagers and farmers, the bus set out for Piracema. The remainder of the crowd either went into the church to pray or dispersed, since, as a man put it, "no one has had *armoço* and it's way past time."

At about 4 o'clock in the afternoon, the bus and the accompanying crowd returned from Piracema. As they approached, they were again saluted by the ringing of the church bells and the setting off of rockets. Pulling up into the village square, the bus halted for the band to play "gay music," and again was surrounded by an admiring and happy crowd. A half hour later, the band from Boa Vista was joined by the village band which had been playing at a *feita* at the church near the river to the north of the village. At the edge of the square, the members of the village band got out of the truck in which they had been riding, formed into ranks and marched up to the bus where they "saluted" the band from Boa Vista with a march, to which this band then responded. The members of the latter band then got out of the bus and greeted personally each member of the local band. After a few minutes, the members of the village band climbed into the bus and played while the bus went slowly round the village. The assembled crowd then broke up, to take food and other refreshment, either at the homes of friends or the village stores.

That night, a dance was held in honor of the event, attended by villagers and farm families and approximately 50 other persons from the towns of Boa Vista and São José dos Patos. The village band first formed in front of the house where the dance was to be held and played until all the men who had organized the bus line had arrived. The members of the band then entered and struck up a waltz to which these men alone danced, after which they were given a vigorous round of applause. Other persons present then joined in the

¹⁹⁹ The colors of the Brazilian flag.

dance and the festivities continued until after midnight.

The following comments reveal the sentiments, attitudes, and expectations which accompanied and defined this new experience in the life of the local inhabitants:

What a dream! I scarcely can believe that I'm seeing the *jardineira* there in the *praça*!"

Now, if you have to go to Boa Vista, all you have to do is grab the "big beast" (*bichona*) and you're in town.

You can't even imagine how much improvement this will bring.

As soon as people get accustomed to riding in this thing, you'll see lots of new faces here.

Now, with all this progress, no one can call us *caipiras*²⁰⁰ any more.

People will have to admit that the *caipiras de carcanhá rachado*²⁰¹ do amount to something. It was us who put in this *jardineira*.

In these and similar remarks, one notes a pride in achievement and a sense of the realization of long-deferred hopes. Predominant is the consideration that the village is now linked with the outside world as it has never been before. "The *peçoar de fóra* (the people outside)," remarked a man, "will now come to know our village." The former isolation, which is commonly referred to as "abandonment," is now expected to disappear. "*Nóis sempre vivemo abandonado e esquecido neste ôco de mundo* (We have always lived abandoned and forgotten in this hole of the world)," said a villager. One observes, however, a note of apprehension mixed with the satisfaction; satisfaction over the achievement, apprehension over the changes that may come.

The bus makes two round trips daily. It is scheduled to leave Piracema at 6 o'clock in the morning and, after passing through the village, reach Boa Vista at 8 o'clock. It leaves Boa Vista on the return trip at 10:30 and, after once more passing through the village, is scheduled to arrive in Piracema 2 hours later. It sets out the second time from Piracema at 2 o'clock in the afternoon; and, from Boa Vista, on the return, at 5:30.

The arrival of the bus each time it passes through the village has become a major event of the day. Even before it is in sight, several men gather at the point where it is to stop, to converse while await-

ing its coming. As soon as it arrives, it is surrounded by men and children who admire it and peer shyly in to see better the passengers who are going through and to listen to their conversation. The meanwhile, the women and older girls lean out of the windows of their homes to observe as much as they can. Four times a day, this event has become an experience in the village to be looked forward to, bringing a new and previously unknown contact with the outer world.

Riding on the bus is also a new and satisfying experience for local residents. Although it has a seating capacity of only 26 persons, on one of the first trips 64 persons crowded inside. On another occasion, 58 persons were observed to be in the bus at one time. The following page from the researcher's notebook describes more fully this desire to try out the new experience:

Upon arriving at the store in Boa Vista where the bus stops, I found it literally "jammed to the doors." "*Dá*,"²⁰² however, someone said. While I was looking about to find a place to plant a foot inside, a boy pushed past with a "*Dá licença*!,"²⁰³ climbed up and wriggled through the mass packed around the door. I sought to do likewise and managed to squeeze in far enough to grasp the iron bar behind the driver. Three men stood between me and the windshield. A man and a boy were to my left near the bar I was grasping. Two persons were seated at the side of the driver on a short bench built for one person. Behind us, the aisle was packed all the way to the back so that a person could scarcely pass. On one of the front seats, hardly wide enough for two persons, were four persons, one of whom had his feet so far out into the aisle that I could move only with difficulty. Three little girls and five men were jammed in between me and the door while three other men hung by their toes and finger tips, part in, part out of, the entrance. In all, 67 persons were traveling on the bus, without counting passengers who were picked up from time to time along the way as others got off, squeezing their way out with great difficulty through the packed mass.

Persons who had rarely, if ever, been away from home, began to get on at points along the way, and to ride over to Boa Vista or Piracema, usually revealing in their behavior the newness of the experience. On one occasion, a man of about 30 years of age, whose features strongly suggested Indian ancestry, appeared rather dazed at the nearness of so many strangers. The bus was extremely crowded. Although the aisle was full of passengers who were standing, the man sat, during the

²⁰⁰ See the following section, p. 107.

²⁰¹ Literally, the "*caipiras* with rough and cracked heels;" that is, *very caipira*.

²⁰² Roughly, "You can make it."

²⁰³ Literally, "Give me permission!"

entire time he was on the bus, with one foot out into the aisle, where persons had to step over it to get past. When the bus pulled up at a wayside store, he seemed undecided what to do. Finally, after the bus began to move on, his seatmate, a stranger who had been talking to the man back of him, discovered his plight and pulled the cord to signal the driver to stop, after which the passenger made his way hesitatingly and with difficulty through the crowded aisle and out of the bus. A few other persons, including two boys about 14 and 16 years of age, respectively, sprawled in their seats with a leg or other part of the body thrust out into the aisle, apparently without realizing that a slight alteration of position on their part would enable persons nearby to stand more comfortably. Each passenger tended generally to ignore the presence of persons unknown to him, even when someone was thrown off balance by the sudden lurch of the bus, as it passed over a particularly rough spot in the road, and brushed against him. Occasionally, however, such physical contact resulted in frowns or even scowls.

The inauguration of bus transportation not only increased the possibility of travel but also afforded, in the bus driver, a ready means of communication with the towns at either end of the bus line. The present driver is a young man born and reared in the village and known and liked by everyone. Regularly, four times a day, he brings in parcels, messages, and news from the outside. As soon as the bus pulls up in the village, he leaps out to go into the store to confer with the storekeeper and the *sub-delegado*, both of whom are part owners of the bus line, about occurrences on the trip over. At this time, he also may pick up or deliver messages or parcels intrusted to his care. He is at once surrounded by villagers who have come down to the store to see the bus pass through. He may have news which he has heard in the town from which he has just come; or he may recount an interesting conversation overheard from passengers on the bus or at a stop along the way. On a recent occasion, he was heard to say, for instance, "*Chiii!* Boa Vista is just boiling with politics! They tell me Laurindo (a man born in the village and now a councilman of the *município*) has gone over to the party of the *prefeito*." After the bus has left, each person about the store will carry away the information or rumor he has picked up,

until shortly it is known all over the village and well out into the surrounding country.

The present driver was hired a short time after the bus line began to function. The first driver, a young man from Boa Vista, was dismissed by the owners of the bus shortly after he began work, one of the principal reasons being, it seems, his inability or unwillingness to respond to the expectations laid upon him of carrying messages and parcels for local inhabitants. Previous to his dismissal, comments like the following were heard: "I don't think Miguel will get ahead in this world. You give him an *encomenda* and when he comes back he has the same excuse every time: 'Oh! I forgot.' That won't do! The driver of a bus must know how to treat people."

The present driver is considered much more dependable in this respect. If by chance he forgets an *encomenda*, he, as a villager tells it, "makes a scene that is impressive. He strikes his head with his hand and exclaims, 'Oh, what luck! But it isn't that I forgot, Seu João. You can be sure that wasn't the reason. Tomorrow, God willing, I'll bring it. Forgive me for today.'" To forget an *encomenda*, however, is a rare occurrence with this young man. He is aware of, and accepts, the local expectations in this respect.

CAIPIRA VERSUS "CIDADÃO"

The comparative lack of contact over a considerable period of time between the inhabitants of rural communities like the one under study and the inhabitants of a city like São Paulo, together with the more extensive and more varied round of contacts to which the inhabitants of the city are continually subjected, has resulted in the development of certain characteristics in the members of each group which mark them off from the members of the other group. Thus, the inhabitants of the city (and to a lesser extent, owing to their greater isolation, those also of the country) have come to think of themselves as belonging to different and distinct entities which stand over against each other.

The inhabitants of the city usually refer to the inhabitants of the country as *caipiras* (see below). The latter sometimes refer to themselves by this term but more often as "*gente da roça*" (people of the fields); or, less commonly, as the timber is cut away, *gente do mato* (literally, "people of the

woods"). They usually refer to the inhabitants of the city simply as *gente da cidade* (city people), although occasionally one also hears the term *cidadãos* (citizens), with its original meaning of "inhabitants of the city," being employed in this connection.

The term *caipira* is used in two different ways: (1) as a descriptive term and (2) as a term of disapproval and even ridicule. Apparently it originally had merely a descriptive function. As such, it referred to a rural inhabitant of the plateau area of the State of São Paulo, in contrast to the *caigara*, or rural inhabitant of the coastal shelf. Racially, the *caipira* is of Indian and European origin, mixed, in varying degrees, from area to area, with the African. His culture varies somewhat from that of the larger cities, one of the differences being the *caipira* dialect (see below). This culture, however, has much in common with that of other rural areas in the settled portion of Brazil. In fact, some persons generalize the term *caipira* to refer to any individual living anywhere in Brazil outside the larger cities. Thus, to many persons in the city of São Paulo, everyone in the "interior" is a *caipira*. ("Interior" is here used in somewhat the same sense as "up country" in New York, or "down State" in Chicago.) Considered the most *caipira* of all, however, would be the man who works the land.

The local alteration in the meaning of the term apparently accompanied the growth of the town of São Paulo into a metropolis and the concomitant development of group consciousness in the inhabitants of the city. The term *caipira* has thus come to symbolize the characteristics of the rural inhabitants which, in the perception or imagination of the man in the city, set the rural inhabitant off from the "*cidadão*" and help the latter to distinguish himself from the man in the country. Especially is this true among the descendants of those *caipiras* who have moved to the city and who, like so often occurs in the case of children and grandchildren of immigrants, are unconsciously seeking means to demonstrate their solidarity with the new group they have joined. In many cases in which it is currently employed, the term consequently has come to have a disparaging connotation and to be used especially for showing disapproval or in ridicule. The characteristics most often associated with the term are simple-mindedness and

naiveté, linked with shyness and awkwardness in unfamiliar situations; a lack of schooling and a consequent persistence in the use of a dialect differing somewhat from the language of the city; a "low" standard of living; and certain personal habits like the use of corn husks and "strong" tobacco for cigarettes.

In this sense, the term *caipira* is also applied to persons actually living in the city whose behavior recalls any of the above-mentioned characteristics. It is especially used by "social climbers" when referring to persons to whom they feel superior.

Supporting this conception is a caricature of the *caipira* made some years ago by a popular Brazilian writer, which to some extent has now become a stereotype and tends to color the thinking of many persons in the cities, especially those who do not know *caipiras* at first hand. "A *caipira* is a *jeca*," said a boy in the city, 12 years old, "that funny *Jeca Tatú* of Monteiro Lobato, who doesn't even wear shoes." "A *caipira* is a country bumpkin who lives in a hut of *sapé*," said a young woman in the city. "He has no education, no ambition, and no knowledge; he is undernourished and sad. He works just enough to keep alive. He is the *Jeca Tatú* of Monteiro Lobato." "The word *caipira*," said a young man in the city, "always calls up for me the image of a man of the fields, barefoot, unshaven, wearing an old hat, a cotton shirt and trousers, and with a cigarette of corn husks dangling from the corner of his mouth. A person very *desconfiado*.²⁰⁴ A great believer in his *santos*²⁰⁵ and terribly superstitious." As such, the *caipira* is at times ridiculed, at other times sentimentalized, in vaudeville and on the radio.

To the above-mentioned characteristics, however, the more thoughtful inhabitants of the city add other characteristics also identified with the *caipira* of which they and others approve: A profound sense of hospitality, "kindness," a carefulness about "keeping one's word," and shrewdness (Pires, n. d., pp. 5, 11).

The two meanings of the term *caipira* are revealed in the following statements made by students of the social sciences, all living in the city of

²⁰⁴ This word is difficult to translate. In this connection, it signifies an attitude of reserve toward strangers which is due to a lack of experience and of self-confidence, as well as apprehension over possible slights or harm.

²⁰⁵ See Santos, p. 147.

São Paulo, who were asked to indicate what they considered to be the significance of the term.

To me, *caipira* refers to a person reared in a rural and isolated society and who for this reason has had little or no opportunity to get on with persons reared in an urban society. Consequently, when he is with persons in the city, he feels and acts as if he didn't know how to conduct himself. He gives an impression of being naïve, even ignorant, regarding matters common to the daily life of the city; and at the same time, he is very *desconfiado*.

In current speech, *caipira* means (1) a man from the country; (2) an uneducated person who has never gone to school and who speaks a queer dialect; (3) a *caboclo*, or person whose ancestors were Indians, mixed with Europeans; and (4) in a general way, an inhabitant of any other city except São Paulo (the *paulistano*²⁰⁶ considers an inhabitant of Campinas (a city of 90,000 inhabitants) to be a *caipira* and he himself would be a *caipira* to the *carioca*).²⁰⁷

A *caipira* is someone who lives in the "interior" of the state (by "interior," we mean outside the capital city). His habits, although basically Brazilian, do not coincide with those of the city dweller. Even a person who lives in the city but who comes from a small town and who keeps his original habits is also considered a *caipira*, no matter how long he has lived in the city.

Caipira for me means a man who lives in the "interior," is not well informed, and has a low standard of living. He lives by farming, using nonrational practices which give him less return than he could get by other means. Although this brings him discomfort, he doesn't feel the necessity of adopting certain improvements which civilization brings.

A *caipira* is a naïve individual who lacks social "polish." He is timid, shy, bashful, awkward; he doesn't know how to do things, how to orient and conduct himself. In short, he is clumsy socially.

Caipira is a term which refers to a person who resides in a rural area. Usually he lives on a bare subsistence level even when he owns some property. When he comes to the city, he feels out of place and insecure for he is not accustomed to so many pedestrians in the streets and to traffic. His beliefs differ a lot from ours in the city. He believes many things which we think are merely "superstitions."

The *caipira* is the most humble type of rural inhabitant. Often, however, in anecdotes, he is presented as a person who gives an appearance of being stupid but who turns out to be possessed of great shrewdness. City inhabitants are accustomed to call each other *caipiras* if the person in question does not behave according to the norms taken to be characteristic of the "great centers." The shy and timid also are often called *caipiras*, owing to the fact that they cannot keep from showing embarrassment in their contacts with other people.

Several persons born and reared in the city of São Paulo and who presumably had not lost their natural ethnocentrism by reason of courses in the social sciences, were asked, "What is a *caipira*?" The responses were:

Girl, house servant, 15 years old:

Caipiras are silly people. They don't even talk right. And they go around laughing at nothing.

Man, pharmacist, 68 years old:

A *caipira* is a person from a farm, who doesn't know how to behave.

Man, owner of a sawmill, 42 years old:

The *caipira* is an ignorant man. He has no notion of civilization.

Housewife, 40 years old:

A *caipira* is an animal from the woods, shy, timid, gossipy. He usually lives in a house made of *pau a pique* and he's dirty.

Woman, normal-school teacher, 52 years old:

A *caipira* differs from other people in the way he walks, the way he speaks, and the way he dresses. He is full of superstitious beliefs. He is simple, reticent, *desconfiado*.

Woman, clerk, 23 years old:

You can tell a *caipira* by his clothes. You don't even need to talk to him. Just notice his trousers; they are always short and tight.

Man, student, 22 years old:

The *caipira* is a simple fellow. When someone lets him farm a piece of land, what does he do? He sets four posts into the ground for a house. He plants a little patch of maize and raises two or three sickly pigs. That's all he does. He makes no effort to improve anything. When a part of his shack falls down, he simply props it up with a stick. When, by afternoon, he's hoed his little patch of corn, he comes to the house, sits down in the doorway, takes out his *pito* (pipe) and smokes as long as he likes.

Woman, student, 21 years old:

I live near the railroad station. What we think of as a *caipira* is a person who comes in from the "interior" and goes either to a charity hospital or to the police station. He is dressed in a cheap, cotton suit and wears high shoes; he is dirty from the dust of travel and he carries a sack instead of a suitcase.

Man, lawyer, 35 years old:

A *caipira* is a mixed-blood of Portuguese and Indian extraction.

²⁰⁶ An inhabitant of the city of São Paulo.

²⁰⁷ An inhabitant of the city of Rio de Janeiro and the surrounding portion of the Federal District.

Woman, primary-school teacher, 27 years old:

A *caipira* is anyone from the "interior," whether he lives in a small town or in the country.

Woman, cashier, 25 years old:

The *caipira* is a man who in Europe would be called a peasant, a worker of the land. He is indolent, undernourished, in ill health and, usually, illiterate.

Man, student, 21 years old:

A *caipira* is a person in the "interior." He lives like one ought to live. He is easily satisfied. Resigned by nature, he cultivates a little patch of land, planting only what he needs to live on. His pipe is his inseparable companion, and also his *violão*. He does not covet riches.

Man, clerk, 25 years old:

The *caipira* is a man in the country who is respectful and hardworking.

Housewife, 50 years old:

A *caipira* is a person from the woods, without schooling; but he is sincere and there is no guile in him.

Apparently, the country people have always thought of themselves as *caipiras*. The disparaging significance now given to this term by many inhabitants of the city, however, is becoming known in the country and increasingly is resented as unfair and undeserved and consequently is used less and less. Local inhabitants defend themselves upon this point. "Among us *caipiras*," said a villager, "one finds a few persons who are crude, but he also finds many who are well brought up and who know how to treat people." "A person may be a *caipira*," said a local farmer, "but he can see who knows how to treat other people and who doesn't. Why, there are *caipiras* here who could give lessons to many persons in the city on how to treat folks."

A village leader explained:

The *caipira* is very shy. It's for this reason that when a person comes to his home the first time, he doesn't make him at home in his house. But he has a good heart. He acts a bit queer, but it's not because he's bad. It's just that he doesn't know what to do when it's a person he's never seen before. He doesn't know very much and this makes him *desconfiado*. He is like a deer: the deer is going about his business, he suddenly sees something and is frightened, he starts running and doesn't stop until he's a long way off; then he comes back slowly to see what it was that startled him. That's the way a *caipira* is. If someone makes him a proposition and he doesn't understand it, he puts him off until tomorrow or some other day, until he can figure it out; then he decides.

Occasionally, a local inhabitant takes delight in a characteristic shown by someone in the community which belies the disparaging meaning given the term. One often hears the remark, "He is a *caipira sabido* (clever, sharp)." Of an especially shrewd business deal on the part of a local farmer, a villager remarked, "Artur is a *caipira viajado* (one who has been around, knows his way about). He's a *caipira* who 'cuts from both sides'; no one catches him unawares. In this world, he who walks least, flies."²⁰⁸ "He is a *caipira* 'of little time,' (one who catches on quickly)," remarked a villager of a friend. "He treats me like I was a *caipira*," said a village storekeeper of a traveling salesman. "I am a *caipira* but I can tell the difference between what is true and what is false. He thinks he'll carry me away with his big talk. I go along, along, up to the point where it is to my interest to follow him. After that, the sauce is different." "They say I'm a stupid *caipira*," said a young man in the village of persons in a neighboring town, "and that anyone can easily fool me. I'll show them what a *caipira* really is" (said with an air of defiance).

At the same time, the country folk tend to think of themselves as superior in several ways to the inhabitants of the city. For one thing, they regard the *cidadão* as less virtuous. "People in the city," said a young farmer, "are very false. You can't trust anybody and nobody will trust you." "Us *caipiras*," said a farmer, "don't live talking about what we are going to do; when we give our word, we stand back of it." "My granddaughters," said a farm woman, referring to the children of a daughter who had married and gone to live in the city, "spend a lot. When they see someone buy something, they have to have the same thing. Such extravagance!" The person from the city is considered to be less able or willing to work hard. "When my granddaughters come to visit me," said the same farm woman, "they don't want to do anything. I say to them, 'Come help us plant' or 'There's beans there to be threshed.' But they don't care to work. They're afraid they'll get calluses on their hands." "People in the city," complained a farm woman, "are too *soberbo*" (haughty, given to looking down upon

²⁰⁸ "That is," the informant further explained, "everyone is taking as much advantage as he can of everyone else and, consequently, everyone must be on his guard."

one). Local residents take pride in their greater knowledge of field and forest and in their ability to deal with the latter. "When *cidadões* get here in the woods," said a villager who likes to hunt, "they are completely lost. If you was to leave one there in Paió Veio,²⁰⁹ he'd be dead before you knew it." Life in the city is thought to reduce masculine qualities. "Men in the city have such fine little hands," said a villager. "To take hold of one of those fellows' hands is just like taking hold of a woman's. They're all the same." Local residents think of themselves as more healthy. "Those people in the city," remarked a young farmer, in a scornful tone of voice, "who always live in the shade; they can't be healthy. It's better to be black²¹⁰ and dried out like I am and never need a doctor." "These people in Boa Vista," remarked another villager, "haven't they seen that us *caipiras* around here are all he men?"

Inhabitants of the community, however, are beginning to take over the disparaging meaning of the term *caipira* and to use it for their own purposes in their own society. Two villagers, for instance, were discussing a matter in a *botequim* when one of them raised his voice a little and said, "You must remember you're a *caipira*!" The accompanying facial expression and other mannerisms, however, indicated that the remark was not designed to offend but only to call attention to the fact that the other man, by reason of his lack of knowledge of the outside world, was not in a position to make the dogmatic remark he had just made. "Quá!" said a farmer, in criticism of a villager, "He's a *caipira* just like we are. But he thinks he's not." The term is also employed by villagers, especially the more competent persons, to distinguish themselves from less able persons in the surrounding country who are extremely shy and do not know how to conduct themselves when in the village. "These people who never go any place," said a man, "these *caipiras* who live there in the woods and never go out, they're the real *caipiras*, people who can't even talk to anyone else. They live all their lives in one place, no wonder." "A *caipira's* like that," remarked a villager of a man on a farm who had behaved in a manner of

which he disapproved, "he never knows how to treat another person." "A *caipira* is certainly a brutish fellow," remarked another villager in a similar situation, "at the least little thing, *vai fazeno desaforo* (he shows lack of consideration, intentional or unintentional)."

The dissatisfaction with life on the farm which was evident from the remarks of the young men cited in the section on Decline of Agriculture (p. 74) is by no means universal in the community. While lamenting the hard work, long hours, and crop uncertainties, most local inhabitants find that the satisfactions of farm life overbalance the drawbacks. This fact is reflected in the following remarks:

A farm boy, age 15:

Life is good on the farm. I like it here. I'm going to plant a large patch of maize. When you see maize growing, strong and healthy, it makes you happy.

A farm boy, age 18:

Life on the farm is fine, especially at harvest time. Then the farmer is content. Spring also is a very beautiful season, when the meadows are covered with flowers and the birds sing so sweetly. If you want to enjoy it, though, you must get up early. If you don't you will miss it all; when the sun begins to get hot, the flowers droop and the birds stop singing. Farm life is a good life, if you are not afraid of getting up early.

A farm boy, age 15:

Farming is a good life, even though you have to work hard. You always have your own food. You can plant beans, rice, potatoes, sugarcane, peanuts, coffee, and vegetables, and then you will need to buy very little.

A farm boy, age 19:

Life on the farm is better than life in the city because if you have to wear patched clothes and if your house is not furnished as well as you would like it to be, no one will talk about you. Besides, on the farm you can take your gun and go hunting whenever you like.

A farm boy, age 14:

I like life on the farm because here you can breathe pure, fresh air. In the city, there is so much noise that anyone who isn't used to cars and trucks whizzing by, soon gets dizzy. In the city, you go to buy a bunch of vegetables and they're all wilted; you get a dozen eggs and when you break one, it pops with such a noise that it breaks your ear drums. You can't find a good house to live in without paying out almost all you can earn to rent it, and you even have to buy water. If you stop somewhere to get a cup of *café* you have to pay half a *cruzeiro* for a little cup only 3 fingers high. One cupful isn't enough; they're too small. So you have to buy three more cupfuls and spend at least two *cruzeiros*. You go to a

²⁰⁹ An uncultivated area near the river, overgrown with brush and vines and much used for hunting by local inhabitants.

²¹⁰ The man in question is a Caucasian. Reference is to the heavy tan acquired by working for years under the rather direct rays of the sun in this latitude.

miserable place to get a meal and you have to pay an awful price and even the water is bad. Yes, life on the farm is much better.

Similarly, most inhabitants of the community who either have been in the city or have heard about it, prefer the simple life of the country to the more exacting life of the city. The wife of a village official recalls:

Seventeen years ago, when I was first married—I was about 16 years old at the time—I spent 6 months in São Paulo. My husband had been called up for military training. I managed to stick it out that long, but it was hard to do. I didn't like anything about the city. As soon as I could, I got in a truck and came straight home. And I've never returned to São Paulo since that day.

Said a midwife:

Every 3 or 4 years, or thereabouts, I visit my relatives in São Paulo. But I never can get used to the city. I can't bear to stay there more than a day. The weather is better here. The water is fresher; it's not like that water in the city that comes out of pipes and sometimes they put something in it. If you go to a village store and you don't have the money to pay for something you need, the storekeeper gives it to you just the same; but if you go to the market in the city and ask for something and you haven't any money to pay for it, just see if they'll let you have it! The only power there is the *cruzeiro*. In the country, no one is in actual want. Every time I go to São Paulo, I take milk to my relatives; I have a niece there who says that the milk in the city has the smell of urine in it. When I go to get the train at the station to come home, I see those long lines of people waiting to buy bread, or to buy meat. What have they done with all the flour and all the meat? The sharks²¹¹ must have taken over the Government. I don't see how those people in the city can have that much patience. Flour is 12 *cruzeiros* a kilo. How can poor people buy it?

"There in São Paulo," said a farm woman, "people are tramping around in the street the whole night through. A terrible lot of racket. Not to speak of Sundays, when it's still worse." "When he has to go even to Boa Vista," said a woman in the village of her father who cannot bear to be away from the farm, "he never stays over night. He says he can't sleep with the noise in the town."²¹² How that is, I don't know; he's deaf." "My niece tells me," said another farm woman, showing great satisfaction and a certain pride, "that there in São Paulo the moon doesn't even shine; you can't see it for the lights. But here in the country, the moonlight is so clear and fine."

"Here in the country," said a young farm woman, "you don't even have to think. But there in the city, everything is so difficult."

A villager whose wife had been taken to a hospital in São Paulo for an emergency operation, remarked after her return, "If she hadn't gotten back pretty soon, she would have died. She couldn't sleep in the city. After the operation, she stayed a few days on *Voluntários da Pátria* street with a street-car passing up and down in front of the house, all that terrible rumble and clatter." "I hear," said a woman in the village who had never been to São Paulo, "that the coming and going of people and cars and trucks there in the city is something awful." "A bird doesn't forget its old nest," remarked a man in the village. "You get used to it. When I've been to Sorocaba or São Paulo and I'm on the way back, up there on the ridge (a high point from which one can overlook a considerable part of the community) *já respiro mais fundo, me dá mais parpíte de comê, fico mais alegre* (already I'm beginning to breathe deeper, my appetite is better, I feel happier)."

CONVERSATION GROUPS

In the evening, between about 5 and 8 o'clock, the men in the village, together with a few farmers, customarily gather in small groups for conversation. This activity takes on something of a regular and consistent pattern so far as the place of gathering is concerned, as well as the composition of the respective groups. No women or girls ever join these groups at any time.

There are three principal gathering places. One of these is the *venda* of Seu Sebastião, where the *homens mais ponderados*, as they are called, come together for conversation. They ordinarily are older men, those who are said to be "more thoughtful, more careful in weighing their words, more reflective, more deliberate." The group almost invariably includes the owner of the store, a man well-liked and respected and a leader in all communal undertakings; the village registrar, a man 57 years old, who carries himself with dignity and self-respect and who also is well thought of in the community; a tall, athletic Negro who is foreman of the men working on the *fazenda* which lies at the edge of the village; an able man who is building a road on the same *fazenda* over which to haul out the wood being cut by a crew

²¹¹ In Brazilian slang, "the profiteers."

²¹² Population, 5,367.

of woodcutters; and four or five farmers or other villagers of similar age and competence. Among the subjects most often discussed are various aspects of local politics; activities connected with farming, the cutting of timber and the building of roads; and the possibility of a rise or fall in the price of farm products. Humorous anecdotes also are told and polite joking is indulged in.

A second group gathers regularly at the principal *botequim*, where drinks are sold and tables are available for card playing. The composition of this group also is rather stable. It differs from that at the *venda* of Seu Sebastião in that there always are more young men than older men present. It also differs in that almost never are any of the village leaders to be seen here; while there usually are present in the group the three men who are especially noted for their consumption of alcoholic drinks. There is considerable drinking and gambling. Most of the men spend the time they are here playing cards; one day they will play *truco*, another day *bisca*, another day *escopa*. Communication is not of the sustained variety like that at the *venda* of Seu Sebastião. It consists principally of exclamations or single phrases. Complete sentences are rare. There is much laughing and joking. Voices often are raised suddenly, sometimes simultaneously from two or more tables where games are in progress. Few anecdotes are told. Hilarity is ordinarily occasioned by the unusual behavior of someone who has been drinking rather freely. Sometimes, a *chorinho*²¹³ forms here, composed usually of three young men playing, respectively, a *cavaquinho*, a *violão*, and a tamborine, and music will be added to the excitement of playing cards, gambling, and drinking with one's friends.

A third group gathers at the bakery. Its composition is also relatively constant. Those present are almost always boys and young men between 15 and 30 years of age. Rarely is an older man to be seen in the group. Although liquor is also sold at the bakery, there is little drinking. Conversation is more sustained than at the *botequim*; less sustained than at the *venda* of Seu Sebastião. Among the topics of conversation most frequently touched upon are women, soccer, and hunting, in that order. Other subjects heard being discussed include mili-

tary service, drinking, a coming *feira*, the raising of song birds, and the ability to drive a truck. A *chorinho* forms here more often than at the *botequim*, usually composed on each occasion of the same four young men, who occasionally are joined by those who customarily play at the *botequim*.

Similar groups do not form at either of the other two *vendas* or at the second *botequim*. Although a few men sometimes may be seen standing or talking at each of these places, the composition of the respective groups is more variable and the time of their forming is more irregular.

On Saturdays and rainy days, the principal points of reunion are the same as those in the evening. On Saturdays, the regular members of the different groups usually are joined by several farmers and their older sons who have come to town to make weekly purchases. On rainy days, the men are together most of the day. That night, however, the stores and *botequins* are closed earlier than on other days, usually by 6 or 7 o'clock.

On Sundays, three additional groups customarily form during the day. One of these is to be seen conversing in front of the door of the church, especially at the termination of Mass; another at the *corêto*, or *sapé*-covered shelter with a raised platform (pl. 19, *a*), in the square in front of the church; and the third in front of the *venda* of the Japanese storekeeper. By evening, however, these groups have broken up and the same pattern prevails as on week days.

The periodic renewal of the communal life is symbolized on Sunday in the number of persons to be seen on village streets. During the week, except on days of *feira*, and at the time when the bus goes through, the streets are almost deserted, the number of persons to be seen in any one street at any one time being quite negligible. On Sunday, however, the situation changes. Beginning shortly after daybreak, several persons may be seen in the streets. The number gradually increases up to a maximum at midday, remains rather stable through the early afternoon, and declines as night approaches. This "pulsation" in the community's life is evident in a count of persons seen during 2-hour intervals from daylight to dark on a recent Sunday. It was made from the window of a house in the village, whence the principal street and a part of the *praça* could be seen. The count was as follows:

²¹³ Also called *batucada*.

	<i>Men</i>	<i>Boys</i>	<i>Women</i>	<i>Girls</i>	<i>Total</i>
6:30- 8:30 -----	4	3	3	1	11
8:30-10:30 -----	25	6	1	2	34
10:30-12:30 -----	45	33	8	7	93
12:30- 2:30 -----	38	23	5	9	75
2:30- 4:30 -----	35	11	5	7	58
4:30- 6:30 -----	22	10	4	—	36

LANGUAGE

The language spoken in the community is the *caipira* dialect of the Portuguese language. Indian languages which were once used in the area, first by the original inhabitants and later by Indians captured and brought in from other regions, together with any language which may have been spoken in the community by imported Africans, have completely disappeared, except for a few residual terms which presently will be noted.

The difference between the *caipira* dialect and the Portuguese spoken in the cities is such that persons, both in the city and among the *caipiras*, occasionally have some difficulty in understanding one another. The dialect differs from the Portuguese spoken in the cities in the following ways:

1. Variations in inflection and tone.

(a) The tendency is more pronounced for the voice to "rise" and "fall" periodically during the course of a sentence so that the sentence has a more rhythmical character.

(b) The tendency to terminate a sentence with a rising inflection is also more pronounced.

(c) The variation between individuals who customarily speak in a high, shrill voice, at times almost shouting, even when standing near the person spoken to, and those who habitually speak in low tones, is greater. This may in part be due to the nervous tension of one unaccustomed to the presence of strangers, as well as to individual or family differences, intensified by isolation and unmodified by training in either the home or school.

2. Alteration of sounds.²¹⁴

(a) The sound of a letter or letters is sometimes added at the beginning of a word; for example,

<i>Caipira</i>	<i>Portuguese</i>
<i>afamoso</i>	famoso
<i>alemrado</i>	lembrado
<i>arreunido</i>	reunido
<i>esporte</i>	porte
<i>informado</i>	formado

(b) The sound of a letter is sometimes added in the interior of a word; for example,

<i>Caipira</i>	<i>Portuguese</i>
Arlindro	Arlindo
chefre	chefe
despois	depois

(c) The sound of an initial letter or letters is sometimes omitted; for example,

<i>Caipira</i>	<i>Portuguese</i>
cabou	acabou
garrado	agarrado
ocê	você
peração	operação
rependimento	arrependimento
risipêla	erisipêla
tá	está
tava	estava
té	até
teligencia	inteligencia
tou	estou
vó	avó

(d) The sound of a letter or letters is sometimes omitted in the interior of a word; for example, *famita* for *faminta*.

(e) There is a tendency to omit the final *r* sound, especially of verbs, and to increase the stress on the preceding vowel; for example,

<i>Caipira</i>	<i>Portuguese</i>
convidá	convidar
familiá	familiar
ficá	ficar
í	ir
lugá	lugar
morá	morar
pagá	pagar
qué	quer
quizé	quizer
sê	ser
tê	ter
vê	ver
visitá	visitar
curadô	curador

(f) There is a tendency to omit the final *l*, *m*, or *s* sound; for example,

<i>Caipira</i>	<i>Portuguese</i>
esmerí	esmeril
oficiá	oficial
quartê	quartel
taquará	taquaral
terrive	terrível
tropé	tropel
cô	com
corage	coragem
home	homem
orde	ordem
virge	virgem

²¹⁴ Since the Portuguese language now has no silent letters, each letter employed having a readily determinable sound, these data have been retained in that language.

Caipira

Portuguese

ante	antes
surramo	surramos
vamo	vamos

(g) There is a tendency to retain only the *n* sound of an *nd* or *gn* combination of consonants, and only the *m* of an *mb* or *sm* combination; for example,

Caipira

Portuguese

brigano	brigando
conversano	conversando
deixano	deixando
falano	falando
ficano	ficando
ino	indo
passano	passando
quano	quando
regano	regando
tamen	tambem
memo	mesmo

(h) A few ellisions are employed which are not used in the city; for example,

Caipira

Portuguese

cos	com os
prela	para ela (by way of <i>pra ela</i>)
prele	para ele (by way of <i>pra ele</i>)
todos	todos os

(i) There is a decided tendency to use an *r* sound instead of an *l* sound; for example,

Caipira

Portuguese

Brasir	Brasil
mar	mal
metar	metal
paster	pastel
peçoar	peçoal
quar	qual
sar	sal
sinar	sinal
argum	algun
arguem	alguem
argodão	algodão
arma	alma
armoço	almoço
arta	alta
assembléia	assembléia
carcula	calcula
cardo	caldo
clarão	clarão
claridade	claridade
claro	claro
culpa	culpa
curto	culto
dificurdade	dificuldade
especiarmemente	especialmente
esclarece	esclarece
farta	falta
marvado	malvado
parpíte	palpite

Caipira

Portuguese

perarta	peralta
praca	placa
sarvo	salvo
Sirvia	Silvia
sordado	soldado
surtão	sultão
última	última
vorta	volta

(j) The *i* sound is usually substituted for an *lh* sound; for example,

Caipira

Portuguese

ataio	atalho
atrapaiado	atrapalhado
fio	filho
oia	olha
oiado	olhado
oreia	orelha
raio	ralho
trabaio	trabalho
vaio	valho
veio	velho

(k) A *u* sound is often substituted for an *a* or *o* sound; for example,

Caipira

Portuguese

casum	casam
começum	começam
disserum	disseram
forum	foram
gostum	gostam
pagum	pagam
viravum	viravam
vierum	vieram
engrurvutado	engravatado
cum	com
cumo	como
cumpadre	compadre
munjolo	monjolo

(l) In the case of words ending in *z* or *s* which are monosyllabic or whose accent falls on the last syllable, there is a tendency to pronounce the preceding vowel as if it formed a diphthong with *i*; for example,

Caipira

Portuguese

arrois	arroz
capais	capaz
cruis	cruz
déis	dez
fais	faz
luis	luz
mais	mas
meis	mês
nóis	nós
treis	três
veis	vez

(m) Certain sounds are transposed; for example,

Caipira

Portuguese

perciso	preciso
porgresso	progresso
proque }	porque
pruque }	
sastifeito	satisfeito

(n) The sounds *b* and *v* are sometimes substituted for each other; for example, *brabo* for *bravo*; *beleza* for *beleza*; and *povre* for *pobre*.

(o) Other substitutions sometimes heard are an *um* sound for an *ão* (for example, *num* for *não*), an *ão* for an *om* (*bão* for *bom*), a *g* for an *s* (*quage* for *quase*), a *t* for a *c* (*tatapora* for *catapora*), a *p* for an *f* (*pantasma* for *fantasma*), an *e* for an *a* (especially in the first person, plural of first conjugation verbs; for example, *andemo* for *andamos*), an *e* for an *i* (*ermã* for *irmã*, *dereito* for *direito*), and an *ai* or *au* for an *a* (*hai* for *ha*, *causo* for *caso*).

(p) In the case of many words, one notes a combination of two or more of the alterations mentioned above; for example,

Caipira

Portuguese

adevertimento	divertimento
andemo	andamos
arfabeta	analfabeta
aprevenf	prevenir
arrepará	reparar
arrepárti	repartir
aveirá	beirar
avisitá	visitar
bamo	vamos
caçoemo	caçamos
conseia	aconselha
cordá	acordar
cavoquemo	cavocamos
cheguemo	chegamos
creditá	acreditar
cumê	comer
desdeixá	deixar
desenvorvê	desenvolver
diantá	adiantar
figuemo	ficamos
frequentá	frequentar
inleição	eleição
judá	ajudar
luvishome	lobishomem
mió	melhor
muié	mulher
nervargia	neuralgia
Nhá	Senhora (by way of <i>Sinhá</i>)
Nhô	Senhor (by way of <i>Sinhô</i>)
pesquemo	pescamos
quarquê	qualquer
rancá	arrancar

Caipira

Portuguese

sinificante	insignificante ²¹⁵
tano	estando
tavum	estavam
venzê	benzer

(q) Occasionally an accent is shifted; for example, *periôdo* for *período*.

3. Variations in the use of certain words and phrases.

(a) The use of exclamatory phrases is more extensive; for example, *Há sete ou oito ano começô a aumentá a festa de Boa Vista. É formidave, é colosso! Tudos nós aqui vamo. É coisa lindo!* (The *festa* of Boa Vista has improved in the last 7 or 8 years. It's wonderful, *tremendous!* All of us go. It's a *beautiful thing!*) There is an especial tendency to employ such phrases following the termination of a statement so as to emphasize what has just been said; for example, *Ele tava embriagado, bebido!* (He was drunk, *drunk!*); *Muié sozinho é muito custoso, muito custoso!* (For a woman to live alone, it is very difficult, *very difficult!*). The exclamatory phrase is pronounced with considerable stress. Moreover, several exclamations, although common also to speech in the city, are much more used by the *caipiras*; for example,

Capais!	E-ê-ê!
Ché!	Ô-ô!
Chiii!	Quá
Credo!	Tá sorto! (está solto!)
Deus me livre!	Uai!
	Ué!

(b) There is a more decided tendency to use vivid or picturesque words and phrases, expressions like the following being relatively common:

Num dá camisa pra ninguém (It doesn't give anybody a shirt.)

Quano sae da linha, a cinta canta no lombo (When he gets out of line, the strap sings on his loins).

O boi quano tá sozinho se lambe todo e quando ele tá em baixo da canga num pode se lambê (When the ox is free, he can lick himself; but when he is under the yoke, he cannot), used to compare an unmarried, with a married, man.

Nóis num andamo na mema pinguela (We don't walk on the same log [across a stream]), used to signify that two individuals do not get along with each other.

²¹⁵ Thus reversing the meaning of the word, *insignificant* becoming *significant*.

Seguimo o mesmo terço (We pray the same prayer),
used to indicate similar behavior.

Troper (Clatter of a horse's hoofs), used to refer
to the sound of rain falling.

Tanto fais o mundo virá pra cima ou pra baixo (It
doesn't matter if the world goes up or down),
used to indicate indifference or resignation.

Ele num dá ponto sem nó (He doesn't take a stitch
without tying a knot), used to signify crafty be-
havior.

Porco se acostuma cõ a sujera do chiquero (A pig
gets used to the filth of his pen).

Passá o preto no branco (To put the black on the
white; that is, to write).

(c) Certain idiomatic expressions vary from
those used in the city; for example,

<i>Caipira</i>	Portuguese
mais bem	melhor
mais bom	melhor
mais pouco	menos
a que feito anda ²¹⁶	que está fazendo; que tem feito

(d) Certain words and phrases are employed
with meanings different from those in the city;
for example,

<i>Caipira</i>	Portuguese
defesa	meios para evitar a con- cepção de filhos
máquina	automovel (not used for caminhão)
nervosa (used as noun)	medo
regulamento	menstruação
tiranía	maldade
uns par de	alguns
a maior força	a maioria
(farta de) respiração	(falta de) ar
(é) quatro pau	distingue-se na atividade de que se fala
abusá	fazer pouco de, ou insultar, poderes sagrados
atropelá	mandar embora, expulsar, escorraçar
bardeá	transportar de um lugar para outro
chaviá	fechar a chave
debandá (used of as few as two persons)	debandar (used only of a number of persons)
falá	expor
festá	divertir-se em festas
pará	ficar, permanecer
pinchá (apinchá)	atirar fóra, jogar
queimá	enganar, mentir
representá	aparentar, parecer
pará com	hospedar-se com
andá fino	andar bem vestido, bem ar- ranjado
atrazá a vida	trazer má sorte

Caipira

dá obediência
desmanchá o intestino
fazê paziguação
morrê matado
tê mais pensamento
famia
daninha
fiteira
liberto
liso
suficiente

(tempo mais) ladino
de condição ruim
bebido
compreendido

dermanchado das feição

sem quantia
tã desmanchado

cô a cara meio cheia
(é) fazenda fina

(é) fim de mundo
(é) uma marmelada

(é) um tiro

Portuguese

ser obediente
dar diarreia
apaziguar
ser assassinado
pensar melhor
filho
traquinas
namoradeira
independente
que atira bem
idoneo, capacitado, sério,
honesto

(tempo mais) adiantado
ruim de nascimento
bebado
entendido, senhor do assun-
to

com as feições transtorna-
das

não tem comparação
está encrencado, está com
defeito

um pouco embriagado
(é) prestimosa, bem edu-
cada

(é) formidável
(é) muito camarada, muito
bom

(é) infalível

4. Grammatical inaccuracies.

(a) There is often a lack of agreement in num-
ber between nouns (especially collective nouns)
and verbs and their modifiers; for example,

<i>Caipira</i>	Portuguese
os mandamento	os mandamentos
os otro	os outros
os santo	os santos
uns tempo	uns tempos
umas vertige, uns ataque	umas vertigens, uns ataques
duzentos reis	duzentose reis
vinte caminhão	vinte caminhões
os nervo abalado	os nervos abalados
eles chora	eles choram
eles cai	eles caírem
nóis num era	nós não éramos
nóis se trata	nós nos tratamos
o pessoar foram	o pessoal foi
os home diz	os homens dizem
a turma pularam	a turma pulou
as moça vão	as moças vão

(b) The substitution of one pronominal form
by another often occurs; for example,

<i>Caipira</i>	Portuguese
aconselhei ele	aconselhei-o
ele queria eu	ele me queria
Maria, me socorra eu!	Maria, socorra-me a mim!

²¹⁶ Analytically correct.

(c) The particle *se*, employed in passive constructions, is sometimes omitted, thereby altering the meaning of a sentence; for example, *É um brejo que não vê o fim* (It is a marsh which sees no end) for *Lá é um brejo de que não se vê o fim* (It is a marsh of which one cannot see the end).

(d) Adjectives modifying nouns of feminine gender are often given the masculine ending; for example,

a gente tá resfriado
ela ficou ali tudo encolhido, muito envergonhado
a crina tá tudo emaranhado

(e) Prepositions are sometimes omitted and sometimes added; for example, *Num posso dizer certeza proque num sei* (*Não posso dizer com certeza porque não sei*); and *í de a cavalo* instead of *ir a cavalo*.

The influence of the school upon the dialect is quite limited, as also is the more erudite speech of the *padre* and of a few other persons from the outside world. Apparently, the principal effect of the school in this respect is to produce in the child a new vocabulary, one which shows up only in writing. A young man in the village said:

I talk *caipira* just like everyone else here. I say *bamo* and *nóis*. Ever since I was a baby, I've heard people speaking that way and I've got used to doing it too. But I know how to write those words; they should be *vamos* and *nós*. All of us who've gone to school know that. But the teacher shows you how to write, never how to talk. She doesn't say anything when you speak as you shouldn't; but if you write a word wrong, she corrects you.

A considerable number of words of Indian origin are commonly employed in the speech of the community. Most of these are either place names or refer to animals, birds, fish, or plants common to the region. An occasional term refers to articles in daily use. Words of presumably undoubted Guaraní origin, since they are listed by Ruiz de Montoya (1639) in his seventeenth century manuscript on the Guaraní language, include:

anú, species of bird (42).²¹⁷
araçá, a wild fruit (65).
araticum, a wild fruit (66).
boicará, coral snake; from *mboi* (215) and the Portuguese word, *coral*.
cará, a tuber (89).

catetú, wild pig; from *taitetú* (353).

cipó, wild vine (94);²¹⁸ employed more especially to refer to certain vines used to tie objects together.

cupim, termites (108); also the "ant hill" formed by termites.

guassú, suffix meaning *large* (128).

icá, female *saúva* ant used for food (172).

nhambú, species of bird; from *Ynambú* (175).

ita, rock (178); used as prefix in place names.

jacá, large basket, made of *taquara*; from *iaqua* (165).

jacaré, crocodile (185).

jacú, species of bird (185).

mandí, species of fish (205).

mirim, suffix, meaning *small* (222).²¹⁹

parnambi, butterfly; from *panūmbi* (261).

pialote, from *pia* (288), affectionate term for a son or daughter, and the Portuguese diminutive, *ote*.

piquira, species of fish (378).²²⁰

pira, a prefix; from *pirá*, fish (297).

sabiá, species of bird; from *haábia* (136).

tamanduá, ant eater (353).

taquára, native species of bamboo; from *taquá* (355).

taurá, armadillo (358).

tucano, species of bird; from *tucá* (400).

tucumã, species of palm, *Astrocaryum vulgare* (400); also *tucum*, fiber from this palm.

urú, species of bird (406).

Additional terms used in the community which other authors²²¹ have considered to be derived either from Guaraní or the related Tupí, include:

arapuca, a trap made of *taquara*, used for catching game birds and small animals.²²²

cambará, a variety of wood.

coivara, partially burnt brush and small saplings left after a piece of land has been burnt over.

coatí, species of animal.

cotia, species of animal.

curiango, species of bird.

encôe, double; used to refer to two bananas (or other fruit) enclosed in a single skin; from *mocóy*, two, twice.²²³

giboia, python.

jararaca, species of snake.

maracujá, a variety of wild fruit (passion flower).

passoca, a food made by mixing crushed peanuts with maize meal.

picuman, soot, mixed with grease.

sapé, a coarse grass used for thatching.

sururuca, large sieve, made of *taquara*.

tapéra, abandoned dwelling which is falling into decay.

tigüera, a field after a crop has been harvested, full of weeds and other natural vegetation.

²¹⁸ Ruiz de Montoya, 1878-80.

²¹⁹ Ruiz de Montoya, 1876.

²²⁰ Ruiz de Montoya, 1878-80.

²²¹ Anchieta, 1595; Beaurepaire-Rohan, 1889; Ayrosa, 1938; Figueiredo, 1939; Luccock, 1880, 1881.

²²² See The Arapuca (p. 85) and plate 20, a, b.

²²³ Anchieta, 1595, pp. 9-10.

²¹⁷ Numbers given in parentheses refer to the page in Montoya 1639, unless otherwise indicated. The meaning given is the present meaning in the community. For further identification of several terms, see Wildlife, p. 17.

During the course of this study, there were collected 109 other terms commonly used in the community and 32 place names, all of which would appear also to be derived from Guaraní or the related Tupi, although their origin may not yet be clearly established.

A few terms in common use are probably African in origin, their number being much smaller than those derived from Indian languages. One of these is a place name: *Mombaca*. Other terms include:

bumbo, a large drum, used in the *samba*.

bunda, buttocks.

cabaço, slang phrase for "hymen."

atinga, unpleasant odor (also used as verb).

fubá, maize meal.

mandinga, black magic.

The sexual vocabulary employed in the community is extensive, reflecting the prominence which sexual ideas, attitudes, and behavior assume in the life of the inhabitants. Seventy words and phrases of a slang character employed with sexual connotation were noted being used by men in the community. Among these words and phrases were 11 terms for the penis, 6 for the vagina, 5 for the scrotum, 4 for the hymen, and 2 for the anus. There are 3 words and 3 phrases used to refer to the sex act. There are 6 terms for a prostitute, 1 for masturbation, 3 for a man "whose thought and action is dominated by sex," 4 terms for a "passive" homosexual, 1 for an "active" homosexual, and an additional term to refer to both types. Six phrases refer to pregnancy; two to puberty in the female; two to strong sexual desire in the female, and two to female frigidity; and one each to a woman "of easy virtue," the act of seeking a sex partner, and a "sexually attractive" woman. Of these slang terms and phrases, it is probable that 10 are of Indian, and 2 of African, origin.

A number of gestures are commonly employed in the community. Shrugging one or both shoulders may mean *Que me importa?* (What is that to me?), *Isso não me atinge* (I haven't anything to do with that), *Ele que se arrange* (It's up to him), *Fazer o que!* (There's nothing else to be done!), or *Estou farto disso!* (I'm fed up with that!); in other words, it may signify resignation, refusal to assume responsibility, or irritation. Affirmation is indicated by a nod, and negation by

a shake of the head. An object is singled out by pointing to it with the index finger, while the other fingers are flexed. Height is indicated by holding the hand at the distance in question from the ground, palm downward and with the fingers extended. A given number is denoted by holding up one's hand toward the person with whom one is communicating and extending as many fingers as correspond to the number. Either the palm or the back of the hand may be turned toward the person although, when the number is five, the former position is more common. In case the number is more than five, the movement is repeated as many times as necessary.

Other gestures are commonly used in the community to signify:

Eating (raising the right hand in front of the mouth, palm inward, and opening and closing the hand several times).

Drinking (repeatedly raising and lowering the right hand in front of the face, with fingers flexed and thumb extended in the direction of the mouth).

"Come here!" (extending the right hand toward the person in question, palm either inward or outward, and opening and closing the hand rapidly).

"Go away!" (holding the arm downward, with the palm toward the body and fingers extended, and pivoting the hand at the wrist, forcefully and repeatedly pushing the fingers outward toward the person in question).

"Somebody took it" (placing the thumb of the right hand on a plane surface and pivoting the hand to the right, while closing the fingers).

An obscene gesture employed locally is similar in form to that with a different meaning developed during World War II among air force personnel in the United States. A circle is made with the thumb and forefinger of the right hand. Reference is to the anus and "passive" participation in a homosexual act. A similar gesture, known as the *banana*, consists in placing the wrist of the right arm in the bend of the flexed left arm. Reference is to the male sexual organ and "passive" participation in a homosexual act.

Olá! is used to call to someone whose attention one desires to attract, as also are *Psiu!* and *O-o-o-o!*

ETIQUETTE

The intimacy characteristic of contacts in the community is evident in the informality with which villagers and farmers greet each other when they meet. No one shakes hands and the greeting common to more formal contacts, "*Bom dia!*" (Good morning!) or "*Boa tarde!*" (Good afternoon!) is rarely used. Such behavior is reserved for encounters with strangers where relations are not of this intimate and primary character.

To pass an acquaintance, however, without a word, a smile, or other gesture indicating that his presence is noted and appreciated, is a grave offense. Usually, one stops to chat a while before continuing on his way. A remark may be made about the weather, or regarding the reason for being at that place at that hour, or something equally banal. This is always accompanied by a smile or other pleasant expression.

Upon meeting a stranger for the second (or any subsequent) time during the same day, the full greeting of "*Bom dia!*" or "*Boa tarde!*" is substituted by one of four expressions: "*Oi!*", "*Olá!*", "*Sim, senhor!*" (Yes, sir!), or "*Nhôr sim!*"²²⁴ Not until the following day is the original greeting used again.

The *abraço*, which is quite common to Brazil, is rarely seen here. It consists in a hearty embrace which may immediately be repeated once, twice, or more times and accompanied by vigorous pats on the back. It is used upon meeting a relative or intimate friend, especially of the same sex. It is particularly forceful and lengthy upon the occasion of setting out or returning from a journey. At weddings, it is customary for the bride and groom to receive either an *abraço* or a handshake from all persons present, especially relatives and close friends.

Throughout the community, the tendency is to call a person by his first name or nickname; rarely is the surname used except to distinguish between two or more persons with a common first name, or on formal occasions such as those when a document is being signed, a marriage performed, or a birth registered.

Both respect and social distance are symbolized in the use of *senhor* and *senhora*. Children employ these terms when addressing their parents as well as older relatives and godparents.²²⁵ A wife whose husband is much older than she is may call him *senhor*, as was observed in a case where the woman is approximately half the age of her husband. A younger person may be addressed as *senhor* if he has high prestige and especially if the person addressing him is a woman. At the same time, a stranger with whom one is dealing in a formal way is also addressed as *senhor*.

The use of *você* may reflect either intimacy with the person spoken to or his inferior status. As a stranger becomes a close friend, the change in relation is symbolized by a shift from *senhor* to *você* when addressing him. At the same time, a parent uses *você* to a child as do all older persons when speaking to younger persons in the family.²²⁶

The use of *mecê* implies a certain deference on the part of the speaker toward the person spoken to. The term is a simplification of *Vosmecê*, which in turn is a simplification of *vossemecê* and *Vossa Mercê* (Your Grace), a form of address no longer heard in urban areas. Its use may imply an actual difference in status, due to age, kinship relation, or other index of social position; or it may reflect the courtesy of the individual who thus, so to speak, reduces himself in rank in honor of the person to whom he is speaking. Whatever may have been the former extent of its use, the term would seem now to be reserved for occasions of extreme courtesy. It was noted being used by a young married man 32 years old when addressing his uncle, aged 62, a man widely respected in the village; by this older man himself, together with other local inhabitants of similar age, when speaking to a prestige-bearing person from outside the community; by a farmer when addressing a group of villagers in conversation at the village store; by men addressing their *compadres*; and by an elderly woman when speaking to her husband. Informants who were asked the meaning of *mecê* replied:

The newer ones (that is, the younger persons) use *mecê* when they speak to the older, the more aged.

For a *compadre* you use *mecê*. It shows great respect.

²²⁵ In neighboring communities, where class distinctions are more apparent, servants so address their employers.

²²⁶ In neighboring communities, where class distinctions are more apparent, *você* is always used when speaking to a servant.

²²⁴ In the local dialect, *senhor* (*senhora*) is often pronounced *Nhô* (*Nhã*).

My mother taught me always to use *mecê*, when speaking to older people.

A wife often refers to her husband as *meu véio*²²⁷ (my old one), a term which reflects intimacy and affection. A few husbands, however, do not like to be so addressed.

When a godchild meets his godfather and godmother, he greets them by asking their blessing, a request which is repeated upon parting. The act ordinarily consists in facing the older person, putting the palms of the hands together in front of the chest as if in an attitude of prayer and saying, "*A bença.*"²²⁸ To which the godparent replies, "*Zabêçõe*" (*Deus abençõe, Deusabençõe*).²²⁹ Occasionally, however, the godchild merely takes the hand of the older person and kisses it, whereupon the latter gives him his blessing.

If the godchild and godparent meet more than once on the same day, the blessing is asked only on the occasion of the first meeting and parting. The act is repeated, however, regularly, as long as the parties to the relationship live. It is not rare to see adults, even persons 40 or 50 years of age, asking the blessing of a godparent.

If a godchild joins a group which includes a godparent without noting his presence or for any other reason fails to greet him, someone will soon say, "Don't you see your godfather (godmother)?" and the godchild shamefacedly will turn and ask the blessing. A similar expectation is laid upon a natural child with reference to his parents when, having for some time been away from home, he comes again into their presence. Formerly, this expectation appears to have extended to all younger persons when greeting older persons, especially relatives. Even today, a nephew or a niece will occasionally, upon meeting an aunt or uncle, ask his or her blessing, as also invariably will a grandchild upon meeting a grandparent. Children will sometimes greet an older acquaintance of their parents in the same way.

If a stranger inquires the name of a local inhabitant, the name may be given with the phrase *seu criado* (your servant) added.

²²⁷ Altered form of *meu velho*.

²²⁸ A shortened form of "*Dá-me a sua benção, padrinho*" (Give me your blessing, Godfather).

²²⁹ Corruptions of *Deus o abençõe* (God bless you).

When a guest indicates he is about to leave, it is good form for the host to say, "*É cedo; num vá ainda*" (It's still early; don't go yet.) It is expected that the guest will remain a while longer, the time involved sometimes being considerable. As a guest who had been visiting for more than 2 hours, for instance, indicated his intention of leaving a farm home, he was told, "You came only a little while ago and now you're leaving. It's too early. You must not go yet."

A characteristic local habit and, in fact, one that is general to Brazil, is for a person to belittle himself and that which is associated with him when speaking to a person who holds prestige in his eyes. This act is a part of the pattern of courtesy and hospitality. It is reflected in the following remark made to persons on the research staff engaged in this study: "Everything here is very ugly. For us, though, it's just like we like it. We are only *caipiras*."

It is common in this community, however, as in other parts of Brazil, for the speaker to refer to himself first when speaking of himself along with other persons. One does not hear, for instance, "he and I," "John and I;" invariably the expressions are, "I and he," "I and John." This form of speaking probably symbolizes the fact that the culture tends to foster rather than to restrain ego inflation.

Some parents do not like their children to smoke in front of the father, although this is done more often today than formerly. "My husband will not let the boys smoke in front of him," said a mother. "That doesn't show proper respect. He never smoked in front of *his* father."

Extending an invitation to a wedding, even if given orally, must be made the occasion of a formal call. A young man meeting another in the village remarked that he would like to speak to him, but only at his home. "It's not something I can talk about here in the street," he explained. Since his friend was busy at the time, however, and could not for some time return to his house, the young man said, "I just wanted you to come and take a beer at my wedding on the eighteenth. I'm not inviting you in the street, remember," he continued, apologetically, "I'll come up to your house later."

Stores are expected to close when a procession passes, as also when a coffin is being carried by on the way to the cemetery.

At a dance, the use of a coat on the part of a man is obligatory; the use of a tie, however, as has been indicated,²³⁰ is optional. Preceding and succeeding each dance, the men remain together on one side of the room and the women together on the other side. To arrange a partner, a man walks over and, stopping in front of the girl whom he wishes to invite, looks directly at her and mumbles a few words which are usually unintelligible. To refuse a request is a gross insult and may lead to violence. The girl leaves her place, dances with the man without conversing, and returns to her seat immediately the music terminates. Formerly, an engaged girl was always expected to dance only with the man to whom she was engaged, although he was in no way subject to the same restriction, a custom still largely adhered to, although now apparently beginning to change. Ordinarily, a wife still dances only with her husband, although the same restriction does not appear ever to have held for the man. There are occasional indications, however, that this restriction on the wife's behavior is also beginning to break down.

When villagers and farmers gather on Saturdays, Sundays, and holidays in the village stores or in the *botequins*, the *tomar um gole de pinga* (taking a swallow of *pinga*), or *rodada* (treat), is a common practice which follows a set form. "*Bamo tomá uma coisinha?*" (Shall we take a little something?) one man says to a friend or two. "*Bamo!* (Lets!)," each replies. Coming up close to the counter, the one who is treating will say to the owner, "Put a little *pinga* there for us!" The owner sets a large glass on the counter and takes up a bottle of *pinga* and begins pouring into the glass, as he says, "Say when it's enough." "There, that's good," one of the men will say. The one who is "treating" then takes the glass and, addressing each person in turn in the store or *botequim* asks, "*Tá servido?* (Are you served?)," to which the expected answer always is "*Obrigado* (Thank you)." If, among the men present, in addition to those at the counter, there is a close friend of the man who is "treating," he will be

more insistent, "*Toma um gole, num faça cerimonia!* (Take a swallow; don't stand on ceremony!);" to which the expected reply is, "Thank you very much, I've just taken a drop. *Que lhe faça bão proveito!* (May it do you good!)" After which, the man hands the glass to one of his friends standing with him at the counter and says, "You begin." "No, you first," is the expected reply. "Not at all! You begin!", says the one who is doing the "treating," as he puts the glass in the hand of his friend. The latter takes a swallow and passes the glass to another at the counter, if there be other men, and then the one who is "treating" also takes a drink.

The *virada*, or "taking of turns," also is a common practice with rigidly prescribed rules of etiquette. It is similar to the *rodada*, except that all persons present are involved. The *pinga* ordinarily is served in a glass which the storekeeper (or proprietor of the *botequim*) fills almost to overflowing. The man at whose initiative the *pinga* has been ordered will then pick up the glass from the counter and offer it to the man closest to him who, after a show of reluctance, gives in to the importuning of the donor, takes the glass, drinks a swallow from it and hands it on to the man nearest him. The glass then continues on around the room, each man putting it briefly to his lips and taking a swallow, until it comes once again to the man at whose initiative it was filled, who then "dries it up," in the words of local slang.

These *viradas*, in external appearance as well as in social function, are reminiscent of the handing around of the "common cup" in certain religious ceremonies in other communities. Both practices symbolize and reenforce the solidarity of the group. No restrictions of any sort are put upon participation. Everyone present, of whatever race, age, or social position, except small children, is expected to participate. "Good form" demands that the donor offer the glass with a show of hospitality and insistence. Actual refusal, except on grounds of known inability to participate by reason of illness or other excusable circumstance, is subject to disapproval. If the refusal occurs under conditions in which serious "loss of face" is implied for the donor, it becomes a serious offense and may even lead to violence. To a stranger who by chance may be present, the glass is also offered, although he is not expected to ac-

²³⁰ See Dress, p. 48.

cept, probably because his failure to participate symbolizes a fact concurred in by all, namely, that he is not an integral part of the group.

To speak favorably of an object belonging to another person, and especially to praise it highly, is ordinarily interpreted as indicating a desire to possess it. A stranger once remarked favorably about the tanning of a goat skin hanging on the wall of a villager's house. The host immediately rose from his chair, took the skin from the wall, wrapped it up and gave it to his guest. The latter's protests were unavailing in the face of vigorous insistence that he carry the skin home. Another man in the village was proudly showing a visitor several old coins, one of which had been minted in the colonial era. When the guest evinced considerable interest in the coins, the host immediately said, "If you like them, you may have them," and presented the whole lot to the visitor. When the latter demurred, the villager insisted even more strongly, "Those coins aren't worth anything to me. Take them!" As the guest continued to insist that he could not accept the gift, the villager, with an air of finality, gathered up the coins and put them forcefully into the visitor's hand.

The giving and receiving of presents are also subject to clearly prescribed rules of etiquette. The manner in which the present is tendered may make the act either a friendly gesture or a serious offense. If the act accompanies circumstances considered natural by the group, it will be well received; if, on the other hand, the previous relation between giver and recipient is not thought to justify the gift, it may be considered an insult or at least a case of *pouco caso* (making light) of the other person.

Similar expectations accompany the doing and accepting of a favor. A villager voluntarily helped a stranger put a few sacks of grain in his truck, after which he joined a group of friends nearby with the satisfied air of one who had discharged well an obligation. When, however, the stranger, with a certain condescension, called to the villager, "Hey, you, there! Take this!" and shoved toward him a 5-cruzeiro note, the latter withdrew a bit, put his hands behind him and, in a voice in which indignation struggled with timidity, replied, "No, sir. Thank you. You don't need to do that." Turning his back on the stranger,

the villager remarked to a friend, "I don't have to accept charity. Did you notice his superior air? Thank God, I'm not crippled and can earn what I need."

The same villager, on another and similar occasion, voluntarily helped a man from Piracema unload his truck at the village store, in the rain, late one evening. When the truck was empty, the driver turned to the villager and said, "Let's take a little swallow," and, leading the way into the *venda*, he asked for a *rabo de galo* (literally, a rooster's tail; that is, *pinga* with vermouth). On being thus treated as an equal, the villager readily responded. After each had drained his glass, the driver asked the villager, "How much do I owe you?" "Nothing," was the reply, "I was just helping you out." "Then take this and get yourself a beer," said the driver, as he laid a 5-cruzeiro note on the counter. "Thank you, but you didn't need to," said the villager, as he took the note and put it in his pocket. The gratuity had been properly offered and accepted, in keeping with the local custom. Payment was indirect and over the necessary protests of the recipient.

The two incidents involved, in each case, a local resident and a person from outside the community. The same expectations, however, attach to similar relationships in which only members of the community are involved. An elderly villager, on an occasion when he had caught several *lambari*, invited one of the storekeepers, whose financial condition was considerably above his own, together with another friend, to take dinner in his home. As a special treat, he had arranged for the meal two bottles of wine. The meal was a pleasant occasion and was partaken of in the midst of friendly conversation.

Afterward, however, the storekeeper, addressing himself to his host, remarked, "You, my friend, are a good man. You are giving us food—good food, with wine, and everything. You know how it is—I can't have you up to my house for a meal like this. Since my wife died, I'm alone there." The villager expressed his understanding and sympathy. The storekeeper then took out of his pocket two notes of 20 cruzeiros each and sought to place them in the pocket of his friend, as he remarked, in a hesitant voice, as if he realized that such a gesture was not in keeping with the local etiquette,

"This isn't to pay you, my friend! it's only a little present for you."

The face of his friend blanched. He indignantly grabbed the arm of the storekeeper and said, "Stop that, Sebastião! What are you doing? I offer you a dinner, as a friend, and you come to me with money! If some day I need money, I'll come to you for a loan!"

The storekeeper, however, insisted, "I'm not paying for the meal, my friend; I'm only making you a little present. A dinner like this can't be paid for in money." And with these words he made a second effort to stuff the bills into his friend's pocket. Whereupon his friend arose and with an air of finality, as if he would admit of no further discussion, shouted, "Sebastião, if you leave that money there, I'll have nothing more to do with you. Our friendship will be over."

At this remark, the storekeeper at once desisted and began profusely to beg the pardon of his friend, saying, "I meant no harm. Don't be angry with me. *Deus lhe pague* for the dinner, *Deus lhe pague*.²³¹ Cordiality was once more restored and the friends parted in peace.

THE CAFÉZINHO

The offering of a *cafézinho* to a visitor is a custom which is deeply embedded in local habits and follows a prescribed ritual. The term "*café-zinho*" is the diminutive and, in this case, the deprecatory form of *café*.²³² Its use thus belittles, as a courteous gesture to the guest, the size of the host's offering. It may, in fact, be far from a "little" serving; although the size will vary with the accommodations of the house, the cup offered may hold as much as half a pint. The *cafézinho* is served at any hour of the day or night when, for any reason, a visitor comes to the house. If he is in a hurry and makes a move to leave before he has been served, the host will usually say, "But you haven't had your *cafézinho* yet. Why are you in such a hurry?"

The guest is never asked if he wants a *café-zinho*; it is always assumed that he does. It is served by the wife or daughters of the host whom the visitor, if he be a man and unless he is intimately acquainted with the family, usually does not see until the host calls to them to bring the

café. It must be served in the best vessels the host possesses. These may be teacups, demitasse, or tin cans either in good condition or chipped, cracked, or dented; but they must be the best he owns. The *café* is served as the host is accustomed to take it, weak or strong, hot or lukewarm, unless the preference of the guest is known, when the host may say, for instance, as a mark of special courtesy, "I had more coffee put in than I usually do because you like it strong."

When the guest has finished his cup, the host will say, "Take more! If you like it, take more!" Courtesy demands that he insist upon this point and, if the guest desires especially to please his host, he will accept a second cup. At the same time, if the guest, upon taking a swallow from a first or subsequent cup should remark, "This *café* is very good; it is just to my taste," the implication is that he desires another cup. Otherwise, he will reply to the insistence of his host, "Thank you. The *café* is very good but I am satisfied."

The *cafézinho* symbolizes the hospitality of the host. It is a form of satisfying the obligation laid upon a man to give food and shelter to every guest whom he receives within his house. The *cafézinho* consequently is offered even upon the occasion of a brief visit, so that no one actually leaves the host's home without having partaken of at least something which has been given him with pleasure.

Offering a *cafézinho* may also serve to sound out the attitudes and intentions of a guest whom the host does not know. He puts the guest in contact with his *café*, his utensils, and the services of his family. By carefully noting the way in which the guest accepts the *cafézinho* and drinks the first and subsequent cups, he is able to obtain some conception of his intent.

If a person is received into a house and is not offered a *cafézinho*, it is clear that either he is a *persona non grata* in that house or that his host is "a crude boor" or a miser. So symbolic of a host's courtesy is the offering of a *cafézinho* that a common way to refer disrespectfully to a person is to say of him, "He wouldn't even give you a *cafézinho*."

Failure to show this courtesy, however, is rare. Even though a person may be extremely poor, he is almost never so lacking in good manners as to omit the *cafézinho*, except under special cir-

²³¹ God reward you.

²³² See Pinga, Tobacco, and Café, p. 41.

cumstances. In those cases in which the *cafézinho* is not offered, upon the occasion of a first visit, the caller usually is a person whose looks, dress, or action has evoked suspicion. To such a person, before he has even entered the house, the *caipira* may say, in a cold tone, "*Entre pra dentro, bamo chegá*" (Come inside), clearly implying to one who is acquainted with the local expectations, "Go on your way! I have other things to do besides entertaining you!" although the same words, spoken in a different tone of voice and accompanied by different gestures would indicate a high degree of favor, in that one's house was being placed at the disposal of the guest.

On the other hand, for a stranger to refuse a *cafézinho* that has been offered him is a serious affront. In a community where the drinking of *café*, as has been indicated, is a universal custom, no one is apt to believe that the refusal is due to an actual dislike for coffee. It can only be a *gesto de pouco caso* (an indication of disrespect). Subsequently, the occurrence will be commented upon all over the community in something like the following words:

He thinks our cups (or cans) are not good enough to put up to his mouth.

He is so used to luxurious things that he scorns what we have.

We offered him the best we had and he turned it down; he needn't come to our house any more.

Failure to accept a *cafézinho*, however, is excused under prescribed circumstances: when, for instance, the host knows the guest has been told by a physician not to take *café*; when the occasion is at night and the guest may say, "*Café* takes the sleep away from me"; or when it is known that the guest has recently taken something cold, like water or beer, which as an informant said, "Everyone knows should not be mixed with a hot drink like *café*." Even in such cases, however, the refusal must be made with tact; it must be accompanied by words and gestures which leave no doubt in the host's mind of the real motive for the refusal. The guest will ordinarily say, "Thank you very much, but * * *; excuse me, next time I will."

If a fly or other extraneous object gets into the *cafézinho*, the guest must not by word or other gesture call attention to that fact. At all costs he must avoid embarrassment to his host. "If he stops drinking," an informant remarked, "the host

will ask what is the matter. Then he will examine the cup and discover the cause of the difficulty. And that would place him in a very embarrassing situation." Similar behavior is expected if the guest discovers that the host has forgotten the sugar, the only exceptions being in those cases in which there is a high degree of intimacy between host and guest.

The behavior expected with reference to the *cafézinho*, however, varies with certain circumstances. If the visitor is a relative or close friend, the host may say, "The *café* is there on the stove in the kitchen; when you want some, you know where to find it." If the visit occurs shortly before one of the principal meals of the day, the host will not offer a *cafézinho* because to do so might be interpreted as meaning that he is seeking to avoid inviting his guest to remain for a meal. If the host would like especially to impress a guest, he may offer him not only a *cafézinho* but also cake or other delicacies, have a tablecloth put on the table and otherwise show him special consideration. This behavior may also be employed, however, as an indirect and subtle means of rebuking a guest for not having treated the host as the host thought he should have been treated when he was a guest in his house.

MAKING PURCHASES

Since storekeeper and customer are almost always intimately acquainted with each other, transactions in village stores tend to be carried on under conditions of primary contact. This relationship is symbolized in one of the *vendas*, in the bakery, and in the principal *botequim* by the fact that there are no physical barriers in the form of closed counters between customer and storekeeper.

The etiquette of purchasing differs markedly from that ordinarily characteristic of the city. A storekeeper treats his customers much as if they were guests who had come to his house for a visit. After entering a store, a customer may seat himself on a bench or a sack of beans or similar object and remain for hours conversing with the owner and other men present. At first, the customer and the storekeeper usually ask about the health of the members of each other's family and about how their affairs are getting on, and then give themselves over with obvious satisfaction to dis-

cussing various topics of common interest. When conversation lags or the hour grows late, the customer will get up from his seat and ask the storekeeper for the articles he has come to purchase; or, if the owner is busy talking to someone else, he may go behind the counter and wait on himself.

If the transaction did not follow some such sequence, the customer would feel offended and subsequently buy his supplies elsewhere. The act of making a purchase is thus more a social, than a commercial, act; it is an extension of the pattern of visiting which is deeply embedded in the local mores.

Exceptional in the village is the procedure in the *venda* owned by the Japanese who, although now largely assimilated,²³³ friendly in manner, and well liked, has not yet taken over what might be called the "visiting pattern" of commercial transactions. Between this storekeeper and his customers there does not yet exist the high degree of intimacy to be observed elsewhere. The relation has a more formal character, a fact which is symbolized by the closed counter in this store, effectively prohibiting the customer from serving himself.

The following incident reveals to some extent the lack of coherence between the expectations on the part of local inhabitants and the actual behavior of the Japanese storekeeper. One morning, a farmer known as Zé do Porto rode up to the *venda* and dismounted. He tied his horse securely to a nearby fence and entered the *venda* where he spoke to the storekeeper and then took a seat on a kerosene can near the counter. For a long time, no one spoke. At last, turning to the storekeeper who so far had made no effort to converse with him, Zé asked, "How goes it, Seu Antonio?"²³⁴ "Not bad," was the reply, followed by another long period of silence. After a while, Zé do Porto got up, went outside and looked up and down the road as if hoping to see someone with whom he might converse. He leaned expectantly up against the jamb of the door and remained there for some time. At last, since no one had appeared, Zé went to his horse, took the *picuá*²³⁵ from behind the saddle and reentered the

store. Laying the *picuá* on the counter, he said, "Give me a kilo of salt and half an *arroba* of sugar."

After the Japanese had weighed out the purchases, Zé put them into the *picuá* and, leaning up against the counter once more, waited expectantly. The storekeeper returned to his stool behind the counter. After about a half hour had passed, Zé turned to the storekeeper and said, "Put a drink there for us." The storekeeper got up and began to pour out the *pinga*, as he asked, "Five hundred *reis* or *destão*?"²³⁶ "You can give us *destão*."

Zé took the glass and, in keeping with the local etiquette, turned to the storekeeper and said, "Are you served?" before drinking it at one gulp. He then continued leaning on the counter for a long time. Finally, he asked the storekeeper, "Do you have an empty bottle to carry kerosene in? I forgot to bring one." The Japanese brought a bottle out from behind the counter and asked, "Will this do?" "It will do," Zé replied, "I'll bring it back later." The storekeeper filled the bottle with kerosene and returned to his stool behind the counter. Several minutes later, Zé picked up the bottle, put it into his *picuá*, taking care to separate it from the salt and sugar he had previously purchased and saying, to no one in particular, "Kerosene has a terrible smell." After waiting a few more minutes in silence, he took up the *picuá* and with an "*Até logo!*" (So long!) to the storekeeper, to which he added, "I'll be going; I have to look after some pigs today," Zé climbed on his horse and left.

Approximately 2 hours had passed while Zé was making his simple purchases of salt, sugar, and kerosene. On the following Saturday, he was observed to be enjoying himself immensely at the principal *botequim*. He spent the day there, from 10 o'clock in the morning until 6:30 at night, talking with his friends, drinking an occasional glass of *pinga* and playing *truco*. At nightfall, as he climbed into the saddle of his horse, he gave every appearance of happiness and contentment.

²³⁰ *Destão* is the local form of *dez tostões*, once used as a slang phrase to refer to the *milreis* and subsequently transferred to the *cruzeiro* when, in 1942, the *cruzeiro* became the unit of exchange in Brazil. The centavo, or the tenth part of a *cruzeiro* is now called a *tostão*, as was previously 100 *reis*, or the tenth part of a *milreis*.

²³³ See *Solidarity*, p. 199.

²³⁴ The Japanese has taken a Brazilian first name.

²³⁵ A bag for carrying articles while on horseback or afoot. (See plate 2, f).

THE FAMILY

In this community, individuals are bound together in families with tenacious bonds of belonging, obligation, and affection which, by way of interfamilial marriage, extend throughout virtually the entire community.

In most cases, family units are composed merely of father, mother, and children. In many cases, however, an aunt, a grandmother, or a grandfather also lives in the household. The size of a family occupying the same house thus ranges from 2 persons (a man and his wife, without children) to 14 persons (a father, mother, their 11 children, and the father's mother). A few families are "joint families," three generations sometimes living together on the same farm, in two or three houses built close together. In each of the cases observed, with one exception, residence was patrilocal, the son bringing his wife to live on the farm of the father. In the exceptional case, not only had a married son brought his wife to live on the farm of the father but also a married daughter resided with her husband on the same farm. The family is ordinarily consanguineous. Occasionally, however, a godchild or other foster child may be reared in the family as an integral part of it. Organization is of the "patriarchal" type, the dominant status and authority of the husband and father being unquestioned. Descent ordinarily is reckoned through the father's line, although a child may elect to take also the mother's family name. At marriage, the wife takes the family name of her husband; in most cases, however, she precedes it with her own family name. Kinship is reckoned in keeping with European patterns and the terminology employed also is European.

The number of relatives personally known to each individual ordinarily is quite large. When asked to give the names of the members of her extended family who were known to her, a young farm woman, 24 years old, recalled without effort a total of 166 persons. This was done spontaneously, without previous consideration to the matter or subsequent consultation, during approximately 2 hours, while the young woman continued preparations for a meal and looked after the needs of her small children. The relatives in question were distributed as shown in the following tabulation:

Number and relationship of members of extended family known to informant, Cruz das Almas, 1948

Relation to ego:	Number
Father.....	1
Mother.....	1
Brothers and sisters.....	8
Father's father and mother.....	2
Mother's father and mother.....	2
Father's brothers and sisters.....	10
Mother's brothers and sisters.....	9
Father's father's brothers and sisters.....	3
Father's mother's brothers and sisters.....	7
Mother's father's brothers and sisters.....	4
Mother's mother's brothers and sisters.....	2
Mother's mother's father and mother.....	2
Children.....	3
Children of brothers and sisters.....	2
Children of father's brothers and sisters.....	28
Children of mother's brothers and sisters.....	32
Grandchildren of father's brothers and sisters.....	10
Grandchildren of mother's brothers and sisters.....	2
Husband.....	1
Spouses of brothers and sisters.....	2
Spouses of cousins.....	3
Spouses of uncles and aunts.....	16
Spouses of grandfathers' and grandmothers' brothers and sisters.....	15
Mother's father's second wife.....	1
Total.....	166

Of the 166 persons, the informant recalled both the given and family name, often including the middle name, for 139, of whom 118 were related to her by blood and 21 were persons who had married into the family. In 11 cases, the informant could not at the moment recall the name of a blood relative. Included were one of the nine children of one of her mother's brothers, one of the two grandchildren of another of her mother's brothers, one of the five children of one of her mother's sisters, and one of the five children of one of her father's sisters. In each of these cases, however, she was able to recall the names of all the other siblings. In 10 other cases, the informant remembered the given name but not the family name of a person who had married into the family; 4 of the 10 are deceased. In six other cases, she remembered the family name but not the given name of a person who had married into the family; all of the six are deceased.

Of the persons listed 64, or 38.6 percent, bore the same family name as the informant. Also represented were 16 other family names, among which were the 6 most common to the community.

The informant is thus related, by either blood or marriage, to most persons in the village and surrounding area. In other words, there are few individuals in the community who are not related either by blood or marriage to everyone else.

There exists no tradition of "family reunions" similar to those occasionally held in the United States, especially in the rural areas. Members of the same family who live in different parts of the community, however, sometimes come together, at irregular intervals, rarely all at the same time. Occasionally parents, for instance, may have their married children and grandchildren with them at such times as Holy Week.

The family is the center of the affectional life of the individual, affording him a set of social relations which usually are of a highly satisfying character. The various members of the immediate family collaborate in the production of food, the arrangement of shelter, and the manufacture of simple articles for daily use. Cooking, washing clothes, sewing, and similar activities carried on by the different members of the family further make this institution an effective economic unit.

The family is also a source of security for the individual. It affords him sustenance and at least the necessities of physical comfort, during the early years of life. As he grows older, this protection is gradually extended to the entire round of his social relations. The family tends to support him in any difficulty he may experience in accommodating himself to other persons in the community or elsewhere, and especially at times of crisis in these relationships. If necessary, the family serves as a hospital and asylum. If the individual becomes ill, other members of the family look after him. When he is too old longer to provide for his needs, the family succors him. If he becomes "queer" or insane, the family sees that at least his minimum daily wants are supplied so that he does not have to go to a public institution.

The protection given by the family to the child tends to extend throughout life. Grown children, even after being married and having families of their own, sometimes live in economic dependence upon the father. In a few cases, as has been indicated, married sons occupy the same farm as their father, they and their children collaborating in common tasks under the direction of the father (and grandfather). In the village, an elderly

man, himself unable to do other than the lightest tasks by reason of his age, oversees the work, on his several farm properties, of his grown children, five of whom are over 30 years of age. There are also numerous cases of sons who, even after they are married and have set up homes of their own, depend upon their parents, especially the father, for guidance in their social behavior, as well as the making of decisions regarding their lives and those of their children. One commonly hears a married man say, "I'm going to talk it over with father; if he thinks it should be done, I'll do it." Although, in each of the cases cited, the father is a competent man, vigorous and strong-willed, the expectation is that even in those cases where the father may be less competent than his sons, they will listen to his advice and show him every consideration.

The round of interaction which proceeds daily within the family group is the principal means by which knowledge and skills are transmitted from the older to the newer generation. The father and mother ordinarily are the principal agents in this process. In most cases, however, brothers and sisters and, in many cases, aunts, uncles, cousins, grandfathers and grandmothers, play decided roles. Together with the members of other families with whom the individual is in contact, these persons constitute a far more effective means of cultural transmission than the local educational or ecclesiastical functionaries. The family is also an effective means of inculcating discipline in the child. Even grown sons, married and with children of their own, have been observed to be taken to task, sometimes in the presence of persons outside the family, for lapses in conduct prescribed in the local mores.

A considerable portion of what limited recreational experience the individual enjoys is afforded by the family, especially in the case of the women and girls. The means are ordinarily simple and consist principally in conversation, the telling of anecdotes and tales and, in the case of the children, in play with brothers and sisters. There is rarely instrumental music in the home and no singing.

Property is owned by the individual; not by the family. No family has a special prerogative to exercise any specific occupational function to the exclusion of other families, the skills for which are handed down from generation to generation.

RELATIONS WITHIN THE FAMILY

Relations inside the family ordinarily are intimate and sentimental and, as such, eminently satisfying to the individual. Parents tend to be indulgent toward their children and to lavish attention and affection upon them. "I work to eat and drink," said a villager, expressing a common attitude, "and to take care of my children."

In some cases, this attention and affection are of such a character as to develop in the child not only a decided dependence upon the parent but also a magnified ego. A healthy 3-year-old boy, for instance, was observed to slip on the earthen floor of a farm kitchen. Although the fall was inconsequential, the child began at once to cry loudly. The father rushed over and picked him up. The grandfather followed and, putting out his arms as if to take the child, said, "Have you hurt yourself, my precious little one?" The boy kept on crying, although the volume of sound diminished. The grandmother then came and took him from the father, speaking all the while to him in endearing tones. Shortly thereafter, the mother took him from the grandmother and carried him out the door, patting him on the back and talking soothingly to him. Since a child tends to take toward himself the attitudes which others take toward him, it is clearly evident that under these circumstances he may soon come to think of himself as a person to whom all other people always respond immediately and fully. "Diva," said a farm mother of her small daughter, "is a caution. When I walk to the village—it isn't very far, you know—she walks along with me all the way, since I have to carry her baby sister and there's usually something else to carry. But when her father's along, she won't walk. Even if she's not a bit tired, she'll sit right down on the ground and won't budge until he picks her up. At home, she runs around, back and forth, the whole day long and never gets tired. It's only when she goes out with her father that she's determined she must be carried." While the mother was speaking, Diva was leaning up against her knee and the mother's arm was about her, caressing the daughter affectionately. In a gentle tone of voice, the mother said, "You're a little rascal, aren't you, *minha neguinha*?"²³⁷

²³⁷ *Minha neguinha* (my little Negro girl) is a term of great affection. See Pierson, 1942, p. 139.

Under these circumstances, one notes a gradual inflation of the developing child's ego which tends to be disadvantageous to him in contacts outside the family and, more especially, in contacts with strangers from outside the community. The child naturally comes to expect treatment from these other persons in keeping with that dispensed toward him in the family and, when it is not forthcoming, to feel frustrated and resentful, usually without understanding the source of these feelings. He then tends to become sensitive, "touchy," easily offended.

According to the local mores, the principal obligations of a mother are to show affection for her children, to care for their needs as best she can, and to teach them prescribed conduct. "The true mother," said a villager, "is one who goes through suffering and overcomes difficulties for the love of her children." Several young men who were asked "What is the duty of a mother to her children?" gave the following replies:

She should love them.

She should feed them and keep them clean.

She should teach them to work and to get on well with other people.

She should love them and teach them to work hard.

She should teach them what is right.

She should take good care of them and bring them up well.

She should love her children and also correct them; for if she doesn't, they will grow up disobedient and ill-mannered.

A child without affection for his mother is considered an extremely abnormal child. When a person in the community refers to his mother, he usually does so with undisguised tenderness. "Everyone should love and cherish his mother," said a young farm boy, 17 years old, "for it is she who, with hard work and much suffering, has taken good care of us. We should understand what she has suffered and always obey her." Other persons in the community expressed the local pattern of these relations in the following words:

You owe more to your mother than to anyone else in the world. No one is equal to her, no matter how good they are.

From the day you are born, your mother works hard for you. She carries you, she feeds you, she puts you to sleep. When you grow older, she still does a lot for you. She never stops thinking about you.

You owe the greatest of obligations to your mother. Out of love and tenderness, she has suffered for you. The son that doesn't love and honor his mother, is an evil son.

Divergence from the ideal pattern in this respect is generally considered unaccountable and is severely condemned. "We children were taught to cherish our mother," said a woman in the village. "We were told that even if a child didn't have enough to eat, he shouldn't let his mother go hungry. But imagine it! I know a woman who needed a little money and asked her grown son to help her. He was living *amigado*²³⁸ with a woman. He said he already had an obligation and couldn't give her anything. What a scandalous thing!"

Relations with the father also are ordinarily of an intimate character and continue so throughout life. The obligation of a father toward his children is to show them affection, provide food, shelter, and other protection and teach them proper conduct in keeping with the local mores. Especially is the father expected to stand back of and support his sons and daughters in every situation which may arise. "Even if his child is no good," said a village leader, "a father should never go against him."

Several young men, aged 15 to 19 years, who were asked "What is the duty of a father to his children?" gave the following replies:

- He should work hard to take care of his children.
- He should love them and work hard for them.
- He should teach them everything they ought to know.
- He should not let them go hungry nor run loose.
- He should provide for them and teach them what is right.
- He should love them and see that they learn to behave.

Relations ordinarily are equally close and sentimental between brothers and sisters. In a village home, for instance, Nilza, aged 9, often is to be seen with her small brother in her arms. She carries him about, feeds him, changes his clothes, and puts him to sleep. On one occasion, Paulo, an 11-year-old brother, was observed to come in from play outside the house and immediately ask to hold his little brother. Proudly he remarked to a visitor that the baby already had a few teeth and then set about to prove it. Ritinha, aged 7, who had also just come in from play

then took the baby from her brother and repeatedly hugged and kissed him as she held him tightly in her arms. In a little while, Paulo asked for him again. As Arlindo, a 5-year-old brother, came in the room, he also stopped to kiss the baby. The attention of the four older children seemed centered on the child. Each appeared not only to show him tenderness and affection but also to take toward him a serious and responsible attitude.

The role of the oldest sister is especially important in this respect. Usually, she looks after the younger children, acting toward them much as if she were the mother. An older girl is commonly to be seen carrying about a younger brother or sister (pl. 7, g). "Eva takes care of the other children," said a farm mother of her 14-year-old daughter. "If she goes out to the field, they have to go along. If they can't, they cry. The older ones help and the little ones stay nearby and play." "Inês will not sleep soundly," said a mother of her 1-year-old child, "unless Rosa (the oldest daughter, aged 8) puts her to sleep." "Filhinha takes good care of the younger children," said a farm mother of her 15-year-old daughter. "I never have to worry when I go to the field and leave them with her. She doesn't like to be away from them for a minute. And they don't like to have her gone. If she goes as far as that hill over there (indicating a distance of about a hundred yards), this little one here (a 4-year-old boy) will cry until she comes back."

"When I was a small girl," said a farm woman, "my 3-year-old brother slept with me. When father called me in the morning to go to work in the field, I'd try to slip out quietly so my little brother wouldn't hear me. But often he'd wake up and say, 'Zana, you haven't taken me out of bed.' I'd take him out and he'd say, 'Zana, put me back in bed.' I'd put him back and he'd say, 'Zana, lie down with me.' I'd lie down and he'd say, 'But you aren't sleeping.' I'd close my eyes and he'd say, 'But you aren't snoring.' By that time, I was ready to spank him. But I never did. As he grew older and mother had him use another bed, I could hardly sleep at night, I missed him so."

A girl 9 years old in the village was out of school this year because of her mother's illness and the necessity of helping care for the younger children. At a farm home, the 10-year-old daughter

²³⁸ See Mancebia, p. 138.

ter takes care of a 1½-year-old child and sleeps with her; the 12-year-old daughter takes care of the 5-month-old baby. "They do everything for them," says the mother, "they keep them clean, dress and carry them about." An elderly woman in the village remembers with pleasure her older sister and of how she helped "all the family."

The older daughter, as well as the other children, also helps with the work about the house and in the fields. At a farm home, for instance, the two daughters, aged 12 and 11 years respectively, know how to cook. Their mother says, "They get the *armoço* and I get the *janta*." At another farm home, a 13-year-old daughter does all the washing for a family of mother, father, and 5 children. "When I was a girl," remarked a farm woman, "I was always working in the house or in the field. The younger children had to be looked after and it seemed that father was always needing help in the field." If a mother dies, the children may be reared by an older daughter, unless the father remarries, or by either the mother's or the father's mother, if living.

Quite often a widowed grandmother lives with the family of her son or daughter. Her relations with the other members of the family, and especially with the children, ordinarily are intimate and sentimental. She usually assists with the household tasks, helps care for the children, and often becomes their confidant and counselor. In one case, the relations between grandmother and grandchildren are so close, that the grandmother has assumed the role of the mother, as is symbolized by the fact that the children call her "mother" and use, when speaking to their mother, the mother's given name.

The mother-in-law ordinarily is the object of respect and consideration. Daughters-in-law often are heard to speak well of their mothers-in-law and especially of the value of their experience with the practical affairs of life. "My mother-in-law," said a woman in the village, "was a good woman. I liked her a lot. She was just like a mother to me." "My mother-in-law lived with me for 12 years," said another daughter-in-law. "She was a fine woman. She taught me many things. It was a great loss when she died." Quite often, when unable to settle a practical problem that has emerged, a housewife will be heard to say, "My mother-in-law will know about that."

Although no evidence of conflict between mother-in-law and daughter-in-law was observed in the community, there exists at least a tradition of such conflict. "A mother-in-law and a daughter-in-law in the same house," said an elderly woman in the village, "is trouble for certain." "She is such a good woman," said a man in the village, referring to an acquaintance, "that she could even get along with a mother-in-law." "When a girl marries nowadays," said a young woman, "she likes to have her own home. It's really better that way."

The pattern of intimate and sentimental relations within the family tends to generalize itself to all persons in the community. In fact, the community itself takes on to some extent the characteristics of a large, extended family as, in reality, it almost is.

RELATIONS BETWEEN THE SEXES

Relations between the sexes proceed largely within the family. As has been noted, women at no time participate in the conversation groups that form regularly in the village. They do not drink or play cards with men. At Mass and other religious ceremonies, the men tend to occupy one side of the church and the women the other, although segregation is not always complete. At *festas*, either religious or secular, women are to be seen talking together among themselves. Rarely does a woman converse with a man, except he be a relative of the family. At dances, as has also been indicated, the women sit together and the men remain apart. There is no conversation between partners during a dance and as soon as the music stops, they separate. A married woman is not expected to dance with men other than her husband, or an engaged girl with a man other than the one to whom she is engaged. For a man to call at the home of another man when he is away is definitely contrary to the mores.

Boys and girls at the village school occupy the same class room. On no occasion, however, do they sit together, except when a teacher deliberately employs toward a boy the most effective means of punishment at her disposal by forcing him to sit with a girl. For several years, the teachers have been women. Since, however, there are only three grades, the oldest boys usually are

not over 10 or 11 years of age. Ordinarily, they show respect for their teacher and are obedient.

It is rare for a farm woman to make purchases at a village store. A few women in the village who occasionally do so usually go directly from the house to the *venda*, make their purchases and return directly home, the amount of time they are away being quite limited. Women with children old enough to make purchases usually send them to the store instead.

The inauguration of regular bus service²³⁹ presents a new and serious problem of accommodation to women who travel on it and who never before have been in such close proximity to strange men.

The relations between husband and wife combine both intimacy and distance. Considerable affection ordinarily develops. Affectionate gestures, however, are never seen in public after marriage, and rarely before, a fond glance constituting the limit in this respect. At marriage, the authority over the daughter formerly exercised by the father passes to the husband. As an observer put it, "The husband becomes the master, the one who directs, the one whose wishes are respected." "When you're single," said a farm woman, "you follow your parents; and when you're married, you follow your husband." "A woman must always obey her husband," said an older woman in the village. "If he tells her to do something, she must do it." In addition, if she would gain prestige in the group, she must become a "good housewife," "a good mother" and "a hard worker."

The wife must not quarrel with her husband or even enter into a serious discussion with him. She must accept, without grumbling, her role (see the following section). If she exceeds the limits set for her behavior, she is subjected to the negative sanctions of gossip and ridicule.

At the same time, this dependent relation has its compensations. The mores lay upon the man the duty of protecting, as well as supporting, his wife. If she were to work outside the family and he were to live from what she makes, he would be universally condemned. The husband holds property in common with his wife. On no occasion, must he strike her. In most cases, more-

over, the formal relationship is at least to some extent modified, and in a few cases it is completely undermined, by the emotional attachments which normally develop between human beings under conditions of primary contact.

The obligation laid upon a husband, as has been indicated, is to provide food, shelter, and at least the minimum of other physical comforts for his wife and to protect her against all harm. "When a man marries," said a village leader, "he takes on a great load. When the ox is alone, he can lick himself; when he's under the yoke, he cannot." "The women say it's the man who has a good life," remarked a village leader, "but the men say it's the man who is the *burro de carga* (pack mule)."

Four young men, each 17 to 19 years of age, who were asked, "What are the obligations of a man to his wife?", gave the following replies:

Love and defend her.

Work hard to keep her from suffering want.

See that she has what she needs to live on.

Protect her at all times.

"My husband gives me what I need," said a farm woman. "If I go to the village and see a piece of cloth there I like and I tell my husband, 'Dito, there, in Sebastião's store is a pretty piece of cloth,' he'll say, 'Go and get the piece you like.' He's been good to me. I even have a silk dress. I have a coat and so does my daughter; not just a cheap coat but one of good wool."

A wife is expected to look after the house and children of her husband, to help him in the fields when he asks her, to afford her husband sexual satisfaction and otherwise contribute to his convenience and comfort. Several young men who were asked, "What are the obligations of a wife to her husband?", gave the following replies:

To take care of her husband's house and live at peace with him.

Not to do anything which her husband does not like.

To help her husband and to love him.

To do what her husband asks her to do.

To take care of the house and keep her husband's clothes in good order.

Not to play around with other men.

The husband is especially charged with the obligation of seeing that his wife lives up to what is expected of her. "If a woman runs after another man," said a farmer, "you can be sure her husband is no good." "If a woman treats her

²³⁹ See sections on Transportation, p. 95, and Isolation and Contact, p. 104.

husband badly," said a villager, "he will see that she *leve a bréca* (catches it)." If the woman performs her role as defined in the local mores, the husband's prestige is increased. At the same time, he is all the more expected to live up to what is expected of him. "If a wife is a good wife," remarked a village leader, "a man must be a good man."

The ordinarily submissive attitude of the woman obviously makes for harmony in the home and bickering and quarreling are rare. "In 16 years of married life," said a farm woman, "me and my husband have never had a single quarrel." "When one of them is good," remarked an elderly woman in the village, "there'll be no quarreling, even if the other is no account. If they fight, it's because neither of them is any good." Some men assume a reciprocal obligation in this respect. A village leader remarked, for instance, "A husband should also obey his wife. They should agree on things."

A casual relation with a prostitute is not considered to constitute infidelity in the man, a point of view which is apparently acquiesced in, sometimes grudgingly, by the women. Emotional attachment to a prostitute or other woman, however, on the part of a married man, is frowned upon by both men and women. "For a husband to leave his wife," said an older man in the village and one of its leaders, "and go running after loose women is the same thing as for a hog to leave his maize and go eat excrement."

Attachments to women other than the wife, however, occasionally occur. A young woman recalls:

My uncle João, the brother of my father, used to leave his wife at home, get into a *charrete*,²⁴⁰ come in to the village, take this woman he liked so well and go driving with her. She was a mulatto woman, married to a black man. Her husband knew about it, but he didn't do anything. He wasn't much good. The woman went out only with my uncle. He gave her many presents: a coat that cost 350 cruzeiros and a pair of glasses that cost 250. He also gave his wife things; but if he'd give her a pair of shoes worth 70 or 80 cruzeiros, he'd give the other woman a pair worth 200. If he gave his wife cloth for a dress that cost 15 cruzeiros a meter, he'd give the woman cloth that cost double that.

Occasionally the wife objects strongly to such behavior on the part of the husband. The most effective control, however, is exercised through his

family and especially by way of his father. The informant mentioned above continued:

My aunt was always quarreling with my uncle about his going to see this woman. Sometimes he'd get up out of bed and go out and sleep in the corner or even in the *terreiro*. But one day when he had gone to the house of this woman, we got word that one of our relatives, the wife of Sebastião, was dying. We all went in to the village to be with her. My uncle heard about our coming and was afraid his wife might come in to the village and he left in a hurry. My aunt did come in and as soon as she got to the village she went to the house of this woman. When she came up to the door, she shouted, "You whore, you black woman, you shameless creature!" The other woman replied, "I may be a whore, but I'm your husband's whore. I may be a black woman, but I'm the woman of a white man." My aunt shouted something back and then went to the house of her mother-in-law and complained about her husband. So her husband's father sent for his son and he said to him, "Your sister is dying. Is this the way you show sorrow for her? You should be ashamed."

The tendency, however, is to tolerate extramarital behavior in the husband, if discreetly carried on. Divorce does not exist and separation with mutual consent is extremely rare. Desertion, although it occasionally occurs, is also under strong negative sanction. A wife will usually accommodate herself to the situation rather than act in an extreme way. She may overlook her husband's infidelities. She is more liable to object to them and let him know of her objection. In the end, however, she usually comes to tolerate them, since there is no alternative. This attitude is reflected in the remark of a farm woman, herself happily married, when she said, "A husband should respect his wife and not let her or the children suffer want. Whatever else he cares to do, that's his affair; one ought not to mind too much."

Extramarital experiences on the part of the woman, however, are universally and implacably condemned. The slightest suspicion is severely reproofed and an overt act may lead to violence and death. A farm woman of whom it is said, "She doesn't care for her husband. If a man of quality comes along, *ela dá*,"²⁴¹ is held in low regard by both men and women in the community.

The injured husband is expected to act immediately he discovers his wife's infidelity and any violence he may show tends to be overlooked and

²⁴¹ Literally, "She'll give;" local phrase for "have sexual relations with."

²⁴⁰ See Tools and Other Equipment, p. 55.

to be justified in both custom and law. A young wife recalls:

Once a relative of mine, the uncle of my father, who had married a second time, found out that his wife was being unfaithful to him. She hadn't been entirely bad; she just liked other men. She had a sister who was no good. He told her never to go to her sister's house. But when he'd leave, she'd slip out and run over. One day he came back early and asked his little daughter, "Where is your mother?" The girl replied, "She's at my aunt's." He went into the village and asked the butcher, "Can you lend me a big knife? I want to kill a goat. I'll send you a hind quarter for the favor." The butcher, who had no suspicions of what the uncle of my father might do, sharpened his largest knife and gave it to him. Then the uncle of my father went over to the sister's house looking for his wife and when he found her, he killed her. When they came to take him, he ran out of the house to meet them and said, "I only cleansed my honor; for, in my family, no one can have a dirty face."

"Of course he should not have done that," continued the informant. "He was a Christian and that was a sin. But she had *feito um grande despreso pra ele* (treated him with great disrespect) and in this way he revenged himself."

A man whose wife is unfaithful to him and who *não reage* (does nothing about it) is called a *corno manso*, literally a "tame horn." The expression is said to come from an ancient belief that horns sprout on the head of a cuckold. The present significance is that such a person "is easily distinguished; everyone can see that he is deficient."

ROLE AND STATUS OF WOMAN

The role of woman in the local society is symbolized by the fact that, upon first entering the village, one notes the almost complete absence of women in the streets or, so far as at first can be observed, anywhere. If he looks more closely, however, he will discover that the women of the various households, without coming directly to either the doors or windows of their houses, are discreetly observing his movements, almost hidden in their homes.

A woman's role, almost without exception, is exercised within and as a part of the family. It is from her activity here that status, almost entirely, is obtained. The cases in which at least a portion of a woman's role extends beyond the confines of the family are few: those of the midwives, the two school teachers, the "blessers," the principal patroness at the village church who has a prominent role in preparing the processions, the

two girls who sing at religious ceremonies, the postmistress, the few women who wash clothes on occasion for other families, and the two girls who work as "servants." In each of these cases, however, the major portion of the woman's role is exercised within her own family.

The routine of local women is largely circumscribed by the following activities:

- Fetching water and firewood.
- Cooking.
- Washing and ironing clothes.
- Cleaning the house.
- Bearing children.
- Caring for the children.
- Training the children in acceptable conduct.
- Helping care for domestic animals.
- Working in the fields when needed.
- Sewing.
- Embroidering, knitting, crocheting, and making *broglie* (lace fringe on flour sacks).

A woman sometimes is allowed by her husband to keep the money she makes raising chickens or other fowl. Even then, however, the money usually is spent for items needed for the family. "I raise a few chickens and a few ducks," remarked a young farm wife. "I also sell eggs. The money I get is mine. I bought that woolen coat you see there. When my husband is out of money, I sometimes get things for him. I bought the suit he's wearing. I buy things for the children, too."

Several young men who were asked their conception of what a woman should be and do, replied as follows:

A good woman works hard and is obedient. She takes care of her family as she should. She washes the clothes, straightens up the house and looks after her husband.

A woman's work is to cook and wash clothes. She should also help her husband in the field so that their life will be a little better. With a lazy wife, a man never gets ahead.

I want a woman who is a hard worker and who will do everything in the house. I also want a woman who will do what I tell her. The man should give the orders, not the woman.

A woman's work is to wash the clothes and do the cooking. A woman who is ambitious for her family will also help her husband in the field. There are women who are hard workers and there are others who are no good; a woman should not want to "gad about" and make a fool of her husband.

Without a woman it would be much harder to get the cooking done and the clothes washed and take care of the livestock.

A woman is a creature similar to a man. But she is generally weaker and more often mistaken. She is usually more violent when angry; but she shows more pity when someone is suffering. All this is the result of her weak nature and it is for this reason that she is more easily dominated. A good woman is obedient, humble, hard working, gentle, affectionate, and faithful. A woman who does not have these qualities cannot be a good woman, no matter what other qualities she may have.

A woman is generally weaker than a man in all ways, in mind, in strength, in everything. A good woman is one who takes care of everything about the house; who cooks and washes and irons the clothes. In fact, she does everything that is needed to be done. And she does nothing to make her husband discontented.

A woman usually is a weaker creature than a man. When she is mad, she is apt to say everything that comes into her head. She doesn't make any allowance for anything and she offends people without knowing it. They are not all alike, though. A few are calm and think before they speak. A good woman obeys her husband and does everything necessary to live happily with him, in peace and harmony.

In all matters the woman is subject to her husband's wishes and is expected to be obedient and submissive. Obedience is a cardinal virtue universally exacted by the mores and concurred in, almost without exception, by the women.

"The men say that women aren't worth anything," remarked a woman in the village. "All the men say that. And the women usually agree with them." "My sister," remarked a farm woman, "always used to say, 'A woman of gold isn't worth a man of clay.'"

The inferior status of woman is symbolized in the fact that a man never calls his marriage partner, "wife" (*esposa*). The term used, almost without exception, is *minha muié* (my woman). A woman, however, refers to her spouse as *meu marido* (my husband).

As has been indicated, there are several activities in which men participate and from which women are customarily barred. No woman participates in the conversation of the groups of men which regularly form in public places in the village. On a few occasions in which a woman has been observed to come up to such a group to deliver an urgent message to a relative or acquaintance, the talk has always ceased. The behavior of the men present indicated that they were waiting until the woman had left before continuing their conversation.

Upon no occasion does a woman participate in a hunt or even think seriously of doing so. Hunt-

ing in this terrain entails considerable physical hardship. To carry a gun in brush and timber where a way often has to be cut with a *facão* (fig. 11), to spend the whole day tramping about, to run rapidly on occasion through difficult undergrowth to follow game which has been flushed, and to carry home on one's back an animal which may weigh up to a hundred pounds, all while subjected to the bites of ticks and mosquitoes, are considered activities only for men. Neither is it customary for women or girls to participate in fishing expeditions. "*Quá!*" exclaimed a man upon being asked if women ever helped bring home fish. "When did anyone ever see a woman on the banks of the river?"

During the period in which the community was under observation, a *futebol* (soccer) team was organized in the village and a few games were played with neighboring towns. No woman or girl participated either in practice or actual play. A few women were present when games were played in the village but none was observed to comment publicly, in the company of men, upon any aspect of the game. Playing cards is a favorite pastime of the men, engaged in at the principal *botequim*, the bakery, or private homes. No woman or girl, however, ever participates in a game, either with men or other women.

There are certain hours when a woman may walk in a village street and certain other hours when she is not expected to be out of the house. After dark, unless she is attending a *reza* or a *festa* or otherwise has a definite objective which is known to all, she remains at home. Effusiveness in conversation is promptly checked by a husband or other male relative, by way of a glance, a casual remark to the effect that the woman is making herself a bit too conspicuous, or a firm order, like that given by a village leader when his wife, during a conversation in which a friend of the family was participating, expressed an opinion of which he did not approve, "Keep still! Go look after the child there in the other room." The order was given in a rather natural manner, however, without the voice being raised. The wife at once left the room. On another occasion, a man and his wife who live together quite amicably, were talking to a friend when a lack of agreement between husband and wife emerged in the discussion. Brusquely the man said to his wife, "Keep

still! You're a *burra*;²⁴² you don't know anything." The wife with patient submission and no apparent rancor, became quiet.

When a stranger enters the house of a local resident, he is never presented to either the wife or daughters. If he inquires regarding them, the reply may be, "They are well," or "They are there in the other room," or "They have gone to get firewood." The manner in which this is said indicates that the inquiry is not especially important.

During the course of this study, male members of the research staff were invited to take meals in several homes in the village and on farms. On no occasion did a wife or daughter join the men at the table or, in those cases in which there was no table, in the room where the meal was taken. They remained instead in the kitchen, appearing only to bring in food or to take out used dishes. Even in those cases where they had not previously been met by the guests, they were not presented upon their entering the room, the husband and father paying little attention to their presence.

Sometimes, when guests are well known to the entire family, an older woman may participate in the conversation at the table even though she does not partake of food there. A villager, for instance, was entertaining several men friends at dinner. As usual, the wife remained in the kitchen while taking her meal. From time to time, however, she spoke through the kitchen door, which was near the table. Becoming more and more interested in the conversation, she edged her way little by little, unconsciously, into the room. She eventually passed around the end of the table, temporarily leaving her plate on the table's edge. When she had finished speaking and absent-mindedly was about to lift some food from the plate to her mouth, the husband called out, sternly, "Get these dirty dishes off the table! If you don't do it pretty soon, you're going to be late getting the kitchen cleaned up." "Yes, yes," was the reply, as the wife hastened to obey.

Several men were playing cards one evening in the home of a villager, a young man who had been married about 2 years. He and his wife had a 3-month-old child. When it became time for the baby to be put to bed, the wife brought him in from the kitchen and, passing through the room

where the men were playing, without speaking to anyone or looking at them, went to bed in the next room. Through the doorway, however, since there was no door, she could easily hear whatever was said, even in low tones, in the room where the men were playing. The men continued to speak in loud voices and, at times, to scrape their feet heavily over the floor during the excitement over some turn in the game, without taking into consideration the fact that the wife and child were trying to sleep in the next room. Around midnight, the child awakened and began to whimper. For some time, the father went on playing. Suddenly, he shouted to his wife, "Ana, Ana, look after that child." The woman awakened and put the child back to sleep and all became quiet once more in the bedroom. About 3 o'clock in the morning, the husband suddenly remarked to his friends, "Let's have *café*!" and then, turning his head toward the other room, shouted in a loud voice, "Ana, Ana, make *café* for us!" Shortly the wife appeared in the doorway, sleepy-eyed, her dress askew, and went into the kitchen whence, a little later, she brought a coffee pot and several tin cans. After pouring the *café*, she handed each can to her husband who then gave it to one of his guests. When a man remarked, "This *café* is good; it came just at the right time," the wife smiled in a satisfied way, without lifting her eyes.

A woman is not expected to participate in politics, except to vote in keeping with her husband's convictions. Said a political leader in the village, "A woman votes as her husband votes. In the house, it's always the rooster who crows; the hen must keep quiet." Of a man in the community whose wife tends to assume a role in political and other affairs which is not in keeping with that laid down in the local mores and who himself is disliked by reason of the superior attitude which he tends to take toward other members of the community, villagers were heard to say, "With a wife like that, there isn't any man who'd be any good."

In a few cases, a man may occasionally assume a role which is ordinarily reserved to the woman. "My husband," said a woman in the village, "knows how to do everything around the house. Once when I was sick for over a week, he did the cooking for every meal." Another man in the village, as has been indicated, is noted for his culinary skill, especially in preparing roast pig and

²⁴² Feminine form of *burro*; the word is used to imply utter stupidity.

similar dishes for special occasions such as a wedding dinner.

Inversion of role, however, in which the woman seeks to exercise authority over her husband and to exact obedience from him is rare and, if it occurs, is severely condemned by both men and women. A woman in the village is notorious for having once gone to the *botequim* and *feito escandalo* (created a scandalous disturbance) to get her husband to leave off gambling and come home. The opposition to gambling is not censured but her appearance in a public place and her attempts to exercise control over the husband's behavior are not only resented by the husband but universally condemned. "A man governed by a woman never amounts to anything," is a common remark in this connection. "A house where the woman is the boss," said a farm woman, "is no good. That's the truth. In a house where the man wants to do something and his wife says, 'You can't do that, I don't like it,' that kind of a house is upside down."

Not even in lesser matters is any tendency at inversion tolerated. An older woman in the village, a person of "forceful personality," was heard to say to her husband, "Quim, get me the candle holder there under the table." To which the husband immediately replied, "*Vá você! Uai!* (Go get it yourself! Why * * *)." The implications in voice and other gesture were, "Why do you ask me to do that? That's *your* job."

The "double standard" of sexual morality to which reference has already been made is a concomitant of the inferior status of woman. It is clearly defined and recognized in the community. "Don't be a fool," said a mother to a son by whom a girl in the community had become pregnant and who, by reason of the fact that he was under legal age while she was older, would not be required by law either to marry the unmarried mother or to make a legal settlement, "You don't need to marry her. You know you can marry anyone you want. The one that's been dirtied (*fica suja*) by this is her, not you." "Poor girl," said a woman in the village, referring to the same person, "What bad luck! If she were a boy, it would be different. Nothing ever sticks to a boy." "A man if he does good," said a farm woman, "that's good; and if he does bad, that's still good. But a woman! If she does the least little thing,

she's talked about." "The girl to whom I'm engaged," remarked a young farmer, "never goes out with me unless her sister or brother is along. That's the way it should be. Because if it isn't, and for any reason we don't get married, no one will say anything about me, but the girl will be talked about by everyone. The least little thing and people are talking."

This double pattern extends to other behavior. "A man can go any place he likes," said a young farmer. "He can come home late, at any hour. But a woman! That's different!" A young farmer who recently married a village girl does not allow his wife to go to the village unless he is along. Instead, the mother and sisters come to the farm to visit her. The young married woman, however, is quite happy and proud of her strong, robust young husband. "A man can dance with anyone but he won't let his wife dance with no one but him," said an elderly woman in the village, describing the prevailing pattern, to which attention has already been called. "When I get married," a young farmer remarked, "I certainly won't let my wife dance with other men. When I'm here, I won't dance either, except with her. But when I'm away, that's different!" When a friend said jocularly, "And maybe she'll dance with others when you're away." "If she does," was the reply, "I'll give her a beating."

There is little, if any, difference in status among the women of the community. The group is largely homogeneous. No women especially stand out above the rest. A few live in better houses and dress somewhat better. A certain degree of prestige also attaches to such activities as those of the midwife, the "blessers," the principal patroness, the teachers, and the girls who sing at religious ceremonies. If any of these persons, however, does not behave toward all the others as equals and tends to reveal a feeling of superiority, her prestige suffers correspondingly.

In addition to failing to live up to her expected role, one of the means by which a woman's status is lowered is to give herself over habitually to alcoholic drink. Said a villager, "I won't have anything to do with a woman who puts a glass of *pinga* to her mouth." On the other hand, a woman's status may be improved beyond that ordinarily accruing to her sex if she evidences unusual intelligence or shows other special competence.

There is, then, in general, a lack of Alternatives so far as a woman's role is concerned. Patterns of behavior are clearly defined so that all know what is "right" conduct and what is "wrong" conduct. And since there is no doubt over what to do, a woman tends to feel secure in her role. It would appear that local women accept it and are reasonably happy in it. Each woman usually obtains that which she had expected to have—a husband, a home, and children—and consequently is satisfied with her lot. She is untroubled by any sense of frustration with reference to a different status which she has never thought of as being possible for her. She cannot feel robbed of that of which she has not yet formed an image. There are, then, no questionings, doubts, or deceptions. If life is hard, it is accepted as in the nature of things and to be conformed to since *a vida é assim memo* (life is like that). Her lot is the same as that of her mother. Her wants are simple. In her world she is integrated. In her home she feels secure.

Moreover, as has been indicated, the formal character of status and role is continually being undermined by attitudes and sentiments which normally develop out of intimate, personal relations. Sympathy, affection, gratitude, respect, and even admiration often come to be felt by a man for his wife, his mother, or his sister. At the same time, a woman who satisfies well the demands of her role may enjoy considerable prestige. She comes to be known and honored throughout the community as "a good wife" and "a good mother." The influence she exerts over her husband is subtle and often quite effective, especially if she has marked intelligence or other competence.

One occasionally observes, however, a certain restraint in situations such as that cited where the husband told the wife to "Keep quiet! Go look after the child!" which indicates some dissatisfaction with role and status and a desire, probably largely unconscious, to alter it.

It would seem that in the community the most satisfying activities in which girls and unmarried young women can engage and which give life zest are to be visited by a boy friend, to go to a *festa*, to get a new dress, and to dance. For the married woman, the most satisfying experiences would seem to be to have a child, to visit with one's relatives and friends, and to go to a *festa*.

MANCEBIA

Mancebia, or the system of conjugal unions outside marriage in which there is some degree of permanence, is a cultural pattern common to all parts of Brazil. The terms customarily employed in this connection, however, are derived from *amigo* (friend). The verb *amigar* and the participle *amigado* are most commonly used.

A few of these unions are similar in essential characteristics to those referred to in the United States as "common-law marriages." Without either church or state ceremony, a man and a woman have come to live together as husband and wife in a union which they consider to be permanent and which may be so regarded by other persons in the community. They may eventually marry. Their relations to each other and to the other members of the community would seem not to vary in any essential way from those of couples who have actually been married according to a religious or civil ceremony.

Not every case of *mancebia*, however, is of this kind. Of a considerably different character are those informal unions which young men may enter into previous to legal marriage. Although the relationship thus established may continue over a number of years, there is neither intention nor expectation of permanence, especially on the part of the young man. The woman usually is from a class whose status is lower than that of the family to which the young man belongs. Eventually he intends to marry someone whose social position more closely approximates that of his own family.

At present, no case of *mancebia* in the community would seem to be of this type, a fact which may be due to the absence of any clearly defined class division in the present population. (See Status and Prestige, p. 200.) An occasional case of this kind, however, is recalled by local inhabitants. Some years ago, for instance, a young man who had been refused by the young woman whom he wished to marry, "became angry and went and *amigou-se*" with another girl, living with her for 6 years before marrying, at the earnest request of his father, a third girl suggested by his family.

There are three couples at present *amigados* in the village. In each case, either one or both of the partners is separated from a legal spouse. A woman, 50 years old, who was deserted by her husband, lives with a man, 52 years old. A man 24

years old and a woman of 29, both of whom are from the neighboring town of Boa Vista, are both separated from their respective spouses. A man, 32 years old, recently began living with a woman of 28, after being deserted by his wife, no longer living in the community.

On a farm outside the village, an elderly widower has lived for 18 years *amigado* with a young woman. "She is a very good woman," said a married granddaughter of the man; "she lives only with him. They did not marry, because to do so the family estate would have to be settled up and that would cost too much. He says they are getting along all right as it is."

To live *amigado* is not generally considered to be proper conduct. "*O povo fala* (people talk about it)," said a villager. "It is *feio* (ugly)." Disapproval, however, is usually of a mild character; and, if the partners are otherwise thought to be *gente boa* (good people), the lapse in this respect is usually tolerated, if not completely overlooked. In cases where a man or a woman has been deserted by a spouse, and especially if children have been left behind, the subsequent *amigação* of the injured partner, since there is no divorce in Brazil, is considered an understandable arrangement. "He liked her," said a young man referring to a couple who came to live together under these circumstances, "and he couldn't marry her; so he *amigou-se*."

Reproval, however, occasionally is voiced in a rather decided manner. The parents of a man whose wife had left him some 4 years before and who was about to become *amigado* with a young girl, agreed to the latter's request that a dinner be given to celebrate the occasion. It was to be held at the home of the man's parents on the evening of the couple's taking up residence together. The dinner was not held, however, apparently owing to disapproval expressed by relatives and acquaintances of the family. A young man was heard to say, in this connection, "For a man or a woman to be *amigado* is not good."

The local registrar of vital statistics brings tactful pressure upon persons who are living *amigado* to marry legally. To a young man who came in to register the birth of a child after living for 2 years *amigado* with a young woman, the registrar said, "You should get married. If someone speaks of your *amiga* then, you can call her your wife."

"That is good," replied the young father, "I'll see what can be done." "I also tell them," the registrar says, "it'll be easier to recognize their children before the law. If they don't get married, the cost in stamps and other charges will be over 100 cruzeiros for every child; and it only costs 120 cruzeiros to get married and then all their children will be legitimate and they won't have to go through all the trouble of recognizing each one. Some of these young folks are awfully ignorant about these things."

"NATURAL CHILDREN"

Children born out of wedlock are referred to locally as *filhos naturais* ("natural children"). The number in the community is negligible.

The rather general attitude toward "natural children," however, is perhaps best reflected in a remark made by a young married man in the village, who said, "Every child is a *natural* child, is it not? How is it possible to have a child that isn't *natural*?" The general tendency is to look upon the procreative process as a normal process; to accept certain restraints on sexual behavior in keeping with conventional patterns but also to be quite tolerant if these restraints are occasionally ineffective. The illegitimate child himself suffers no stigma. His illegitimacy is considered, rather logically, to be beyond his control and responsibility.

Censure falls entirely upon the mother. If, however, a marriage is arranged with the father of the child, especially before the child's birth, the lapse from sanctioned conduct tends to be overlooked and, with the passage of time, forgotten. Its recall rarely occurs except in conflict situations when someone seeks to muster all the damaging evidence possible to slander the object of his wrath.

The present attitude toward illegitimacy probably reflects imported Portuguese mores, reinforced by African and Indian cultural heritages, together with the circumstances of colonial settlement in Brazil (Freyre, 1943; Pierson, 1942). Moreover, it has long been supported in Brazil by the inconsistency in the definition of illegitimacy as given by the state, on the one hand, and the church on the other. The state does not recognize marriage when performed only under ecclesiastical sanction, officially considering illegitimate

children born to parents not married according to the civil code, even though there may have been a religious ceremony. At the same time, the church does not recognize marriage under the civil code, considering illegitimate all children born to parents not married according to the rituals of the church, even though there may have been a civil ceremony. Parents who had been married according to one or the other of these ceremonies have naturally felt that there was at least some reason to consider their children legitimate and this fact has tended to reduce any stigma which the word "illegitimate" may have implied. As an elderly inhabitant of the village once said:

To the priest, the children of those who marry "in the civil" are illegitimate, and to the registrar of births, the children of those who marry "in the church" are illegitimate. If you thought very much about such things as that, you wouldn't get much sleep at night.

A father may legally recognize an illegitimate child, if he is not the result of an incestuous or adulterous union. Recognition enables the child to share in inheritance equally with the father's legitimate offspring.

SPINSTERS

The expectation laid down in the local mores is that every girl will marry. "If she gets to be 17 or 18 years of age," said a woman in the village, "and she hasn't yet found her a man, people will begin to say, 'She's getting old; why doesn't she marry?'"

Spinsters are relatively rare in the community. There are only five in the village. One is epileptic and one is insane. Of another, a villager said, "She's quite a woman. She's too outspoken and opinionated to get a man. No one would have the courage to ask her. She will take a stick and set out afoot for Boa Vista, alone." Of the fourth, a sister said, "She just didn't care to get married. When a young man would speak to father about her, she'd say she was too young. After a while, no one came around any more." Of the fifth, a sister said, "She was the oldest of us children. She took care of the house and helped all of us get married but for some reason she herself never did." A woman 29 years of age, on a farm near the village is also unmarried. "She's turned down men who asked her," said a neighbor, "because the first one she wanted, her father objected to him."

A seventh woman is considered by some to be a *solteirona* (spinster) because "she is 26 years old and hasn't married yet." Several men have courted her but "they always break off." "I don't know why," said a neighbor, "it must be fate."

An unmarried woman is at a disadvantage both economically and sociologically. Her economic value in the community is slight. She is apt to be considered a burden by her parents, especially if they are poor. "Marriage is best for a woman," said a mother of five and sister of one of the spinsters in the village. "She should get a husband to help earn her living. Always for a woman, it's better to marry." At the same time, since the spinster is not a party to many of the common interests and experiences of almost all other women of her age, she tends to live in a world apart; to be treated differently by those who are married and have children, and thus to think of herself as different, if not abnormal.

Of the five spinsters in the village, one is 73 years of age. She owns a house, which she shares with a bachelor cousin. Together with two married sisters who live in the village, she also owns a small *sítio*. Her relatives help support her. "One gives this, another that," said a sister. "Perhaps money, perhaps not. But all help." The woman who is epileptic lives with her widowed father and his younger children. The woman who is insane, lives with her mother, who is a widow, and an older brother. The fourth spinster lives with her father and mother and four bachelor brothers. The fifth shares a house with a married couple; she washes clothes, cares for the linen of the church, and does whatever other work she can find to do about the village. The sixth spinster lives with her father on a farm.

WIDOWS

In a community where the struggle for a living is difficult, even under the most propitious circumstances, and where girls are trained only for the role of wife and mother and expected to assume a dependent attitude toward father and husband, the lot of a widow is especially hard. A 70-year-old widow said:

My husband died when I was only 32 years of age, and left me with 7 children and another child 3 months on the way. But I raised them all. I made and sold all sorts of pastries. I carried them about on a tray

on my head. I went to every *feira*; those here in the village and those in other parts of the community. I would hire a pack mule, put everything on its back, and go with the children. When I got there, I'd set up a stand and sell my pastries. I also owned a sewing machine with a foot pedal and did sewing for other women. With the pastries and the sewing, I brought up all my children.

A few widows marry again. Usually they are those who possess some property and who have few, or no, children. "This woman keeps saying she'll never marry again!" remarked a villager of a widow with seven children. "That if she went around with a lantern, she couldn't hope to find a man as good as the husband who died. I tell you she can look as long as she likes with that lantern. Poor and with seven children, she'll never find a man who'll marry her. If she had 3 *alqueires* of land, it is possible; and if she had 15 *alqueires*, it would be much easier."

Those who have relatives living in the community, however, either of their own family or that of her husband, usually receive as much assistance as the relatives are able to offer. If the widow happens to be without relatives in the community, other villagers or farmers will from time to time help take care of her most urgent needs. "Someone will give one thing, someone else another," said a villager.

One widow, whose husband was a *soldado*, receives a government pension of 280 cruzeiros a month. "But that isn't enough to live on these days," she says, with evident truth. A few widows make a precarious living washing clothes for other families, acting as a midwife or, like the widow cited above, sewing and making and selling pastries.

There are 16 widows living in the village. Nine own their own homes. Two other widows, one of whom is 91 years of age and the other 65, live with a married son or daughter. Another widow, 40 years of age, lives with a married sister. Three others live with unmarried but adult children: one, aged 68, lives with her 25-year-old son in a house for which they pay 20 cruzeiros a month rent; a second, aged 62, lives with her 28-year-old son in a house for which they pay 40 cruzeiros a month rent, the mother working regularly at "toasting" maize flour in the mill of her son-in-law on a *sítio* just outside the village; and the third, aged 39, lives with her older sons, one of

whom is 20 years of age and the other 18, both of whom work as day laborers on farms in the community, and two younger sons, aged 11 and 9 years, respectively. A widow, 40 years old, lives with her mother, also a widow, who owns her own home.

Of the 9 widows who own their own homes, one is 30 years of age and lives alone with 7 children from 11 years to 7 months old. A second is 64 years of age and lives with a 25-year-old son and 18-year-old daughter. She earns part of the living by washing clothes in the nearby creek for neighbor women. A third is 48 years of age and is paralyzed. She is cared for by a family which rents her house at the nominal rental of 10 cruzeiros a month. Another is 72 years of age and lives with a 51-year-old son, himself a widower, a 35-year-old unmarried daughter, and a 17-year-old grandson. Another is 70 years of age and shares her house with a married daughter and her family. Another is 59 years of age and makes a precarious living as a part-time prostitute, sharing her home with another part-time prostitute and the latter's 3-year-old son. Two other widows live alone, one of whom is 66 years old and has a pension, as indicated above; the other is 54 years of age and works occasionally at light labor in the fields of nearby farms. Another widow, 58 years of age, shares her home with a 21-year-old son and a widowed daughter 40 years old, together with the latter's children, aged 22, 18, 15, 13, and 4 years, respectively.

The following account by a widow in the village reveals in an intimate way the attitude taken toward the widow by other persons in the community:

My husband died last year of tuberculosis. The year before we had had a fine crop. We harvested 60 sacks of rice. Our maize made a huge pile. And you should have seen the potatoes we dug! We had everything we needed. A great plenty! And look at us now! Who would have thought this would have happened to me. I have seven children and no husband. It's difficult to find any work I can do on a farm. I did have a sewing machine, but I had to sell it. I also sold my husband's *garrucha*.²⁴³

Everyone helps me, though. My brother in the village gives me a little money sometimes. My sister is a cook in Piracema and she sends me something once in a while. When I go to other people in the village, they are always good to me. The children were needing clothes. A

²⁴³ A double-barreled pistol. See Protection: the Faca de Bainha and the Garrucha, p. 50.

woman got together some things that her children didn't need any more and sent them over to me. When I have to have medicine, the wife of the pharmacist in Boa Vista gets it for me. My neighbor helped plant that patch of beans there. When they came up, my father did the hoeing and the weeding. They're doing fine, as you can see; the vines are heavy with pods. If it doesn't frost, we'll have plenty this year. The other day, a *comadre* was here and took me with her to the *sítio* of Seu Antonio and he gave me some lard and some salt. He also said he would soon be digging potatoes and to come and get some.

My boy here is 11 years old. He sells vegetables for Seu Lindoro "on thirds." Every few days he gets up early and goes out to the farm to bring them in. It's fine for him; he's learning how to sell things. From another farm he brings milk to three families in the village and each family pays him 5 cruzeiros a month. I have a godchild that lives on a farm. When I go there, he catches a couple of chickens and says, "Here, godmother, these are for you."

COMPADRIO

Among the primary mechanisms of solidarity in the local society are the relations developed within the system of *compadrio*. Every child at baptism has a *padrinho* (godfather) and a *madrinha* (godmother) selected for him by his parents. He is ever after bound to these godparents and they to him by special bonds of obligation and expectation. At the same time, his parents are equally bound to the godparents of their child, a fact which is symbolized by the term they use in addressing each other. It is *compadre* (*comadre*) or literally, co-father (co-mother). The use of this term becomes so habitual that in most cases it completely supplants given names or nicknames or, if the *compadres* are relatives, the kinship terms previously employed.

At christening, another godfather is chosen for a boy and another godmother for a girl. Godparents are not chosen, however, for the first communion. At marriage, each partner selects someone to accompany him to the altar and to act as a witness to the ceremony. There is a tendency to think of this person as another godparent, although he is not considered a *compadre* by the parents. In some cases, he may be the same person as the baptismal or the christening godparent, but such is not common.

If, as usually occurs, a married person is selected as a godparent of the child, the spouse is always selected as the other godparent. There

is no special ceremony attached to either the selection of a godparent or his notification of that fact. It was once customary to select the father's parents as the godparents of the first child, and the mother's parents as the godparents of the second child. This custom is no longer followed in all cases.

The system of *compadrio* is functionally an extension of the family institution. It provides for the child, as it were, a second set of parents. Should, for any reason, either one or both of the natural parents be unable to discharge their normal obligations toward the child, the godparents will substitute them. In the meantime, the godparents are expected, as necessary, to supplement parental care and counsel. At any time when the parents are unable to meet a crisis in the child's life, the godparents may be sought out and are expected to do everything possible for the child.

The relationship between *compadres* is of so intimate a character that certain proscriptions are laid upon their conduct. Under no circumstances may a *compadre* marry a *comadre* or have sexual relations with her or dance with her. As an informant put it, "*compadre* and *comadre* must have great respect for each other." "Imagine it!" exclaimed a villager, "I hear that there in Piracema a *compadre* married a *comadre*. Here in the village there has never been anything like that. A *compadre* and a *comadre* have a spiritual relationship. If they marry, maybe nothing will happen in this life. But in the next, they'll suffer plenty."

The godchild is expected to be affectionate to his godparents and to respect and obey them, an obligation which is symbolized in etiquette. Upon meeting a godparent, as has been indicated, he is expected to ask his (or her) blessing and to receive it with humility.²⁴⁴ Formerly, he was also expected to kiss the hand of the godparent, but this custom appears to be disappearing.

Of several young men who were asked, "What are the obligations of a godchild to his godparents?", the replies were:

To respect them.

To respect them as you do your own mother and father.

To ask their blessing and to respect them greatly.

To ask their blessing.

²⁴⁴ See Etiquette, p. 121.

To receive the blessing and to respect them.
To ask their blessing and to kiss their hand.

A godfather or godmother sometimes exercises greater control over a godchild than its own parents. To an 18-year-old girl in the village who wished to accompany a group who were going in a truck to a neighboring town, her mother said, "Your godmother won't like it." The girl, however, decided to go anyway. "When I saw the truck," said the godmother later, "and someone told me my godchild was in it, I went right down there and told her to get down off the truck. She got down in a hurry. What does a girl mean to go out that way when she may get home late? I won't have it."

At times, the godchild may assume obligations of a material character toward a godparent. One young woman in the village, for instance, who has a steady income as postmistress, gives her spinster godmother 50 cruzeiros each month.

The relation of *compadrio* binds together a large portion of the community. Since each child has two godparents at his baptism and one also at his christening, and his parents themselves may be the godparents of other children, in due time a large number of people will be related in this way to a large number of other persons, and eventually these interrelationships will become so numerous that they extend throughout the entire community.

Of 25 persons who were asked how many godchildren each had, none had less than 1 and one person had 40; the average was 8. Another person replied, "More than a hundred." A villager who was asked to prepare a list of his *compadres* gave the names of 53 persons, 42 of whom reside in the community. Three live in one neighboring town and two in another. Three others live in a small town about 25 miles away and one lives in each of two other towns about 30 and 60 miles away, respectively. One is in São Paulo. Of the 53 *compadres*, 7 are relatives: 4 are brothers, 1 is the man's father, 1 his son, and 1 is his son-in-law. The other 46 bear no blood relationship to him.

The institution appears to be functioning as effectively today as in the past. A village official, upon being asked if he had observed any lessening of respect between godparents and godchildren and between *compadres*, replied, with positive

conviction, "None at all. In every time and place there are always some people who are no good. But there are no more today than there used to be."

RITUAL, CEREMONY, AND BELIEF

Indicating the fact that, in the area under study, religious ideas and practices occupy a prominent place in the thought and other behavior of local inhabitants, the weekly newspaper in the nearby town of Boa Vista gives over a generous portion of each issue to announcements of coming religious *festas* or accounts of past *festas* and other news of similar character. In the issue of January 3, 1948, for example, a headline in bold type which runs entirely across the front page, reads: "Send in your *Prendas*²⁴⁵ for the auction to be held on January 4, 5, and 6 in honor of the church of the miracle-working São Benedito. *Prendas* can be sent either to those in charge of the *festa* or to this newspaper and São Benedito will thank you with his blessing." Underneath is a reproduction of the image of São Benedito and a prayer. The upper third of the front page is entirely given over to the announcement of the *festa*.

Rituals and ceremonies of a religious character which are performed in the village church, in the various chapels scattered about the community, and in private homes are primarily Roman Catholic in derivation, as also is the belief predominant in the community. The principal sacred functionary is the *padre*, who is appointed by the ecclesiastical authorities and is assisted by the patronesses and the acolytes.

One observes in the rituals and ceremonies, however, which are predominantly Roman Catholic in derivation, especially those held without the attendance of the *padre* in the wayside chapels and in private homes, as well as in the belief of almost all persons in the community, certain elements of folk derivation. In local thought and practice, for example, the work of the "blessers," which is believed to have magical efficacy, assumes a prominent role. Belief and practice with reference to the *santos* are extensively encrusted with folk elements, as similarly are those with reference to the *almas*, the *promessas*, and certain *festas*.

²⁴⁵ See discussion of the *leiloeiro* in Division of Labor, p. 58.

Moreover, not all ceremony and belief in the community is now identified with the Roman Catholic Church. In comparatively recent years, three Protestant sects have invaded the area, as also has Spiritualist belief and practice.

A census taken in 1888 listed the entire population of the community as belonging to the Roman Catholic Church. In 1934, or the most recent date on which information of this sort can be obtained, local inhabitants classified themselves with reference to religious affiliation in the following way:²⁴⁶

Sect:	Masculine	Feminine	Total	Percent
Roman Catholic-----	1, 878	1, 716	3, 594	95. 1
Protestant-----	64	38	102	2. 7
Spiritualist-----	36	31	67	1. 8
Others ²⁴⁷ -----	9	4	13	. 3
No data-----	3	1	4	. 1
	1, 990	1, 790	3, 780	100. 0

Masses and *rezas* at which the *padre* is present and officiates, are held regularly each week in the village church. At both Mass and *reza*, there is usually a sermon. A number of religious *festas*, at each of which there ordinarily is one or more processions, are held periodically. Usually one or more *romarias*, or pilgrimages, are made each year to noted shrines. These activities are described in greater detail below.

An association at the village church known as the *Apostolado da Oração do Sagrado Coração de Jesus* (Apostleship of Prayer of the Sacred Heart of Jesus) sponsors prayer and other religious activities. Both men and women are admitted. Children, up to 15 years of age, provided they have taken first communion, are accepted into a subdivision called the *Cruzada*. For the admission of adult members, a ceremony known as "the delivery of the *fitá* (ribbon)" is held on occasion in the church at the close of a *reza*. The new members kneel at the altar, the men to the right and the women to the left. Those who are already members gather to either side, in keeping with their sex. The *padre* speaks a few words appropriate to the occasion and then a patroness puts a ribbon about the neck of each new member in turn, after which the new members are given *abraços*, the men by the men, the women by the women. On

the occasion of a procession, the men wear dark red sleeveless cloaks over their clothes. The children of the *Cruzada* dress in white.

At least one family in the community builds a *crèche* for Christmas and Epiphany. This present year, it was constructed by the 12-year-old daughter, with the assistance of her grandmother. In a corner of the principal room a platform was built. Over it, at the rear, a semicircular canopy was erected. Both platform and canopy were then decorated with Spanish moss, artificial flowers and streamers cut from crepe paper. A stalk of maize was stood up to each side of the canopy. Under the latter, at the back, there were placed small images of Mary and of Joseph and three small images of the Infant Jesus in a cradle, as well as a representation of a cow. In front were a black doll, made of celluloid, a row of lead soldiers, several tufts of grass, and a dish with water on which a few celluloid ducks floated. Above the images, gilt and silver balls were hung. "When I was a little girl," said the grandmother, "My parents used to make a *crèche* each year on the 24th of December. After they died, my sister made one every year until her death. After that, I have seen that a *crèche* is built each Christmas. One must not fail to do this, or something awful may happen." On the evening of the 6th of January, a *reza*, or ceremony of prayers and singing, in which friends and neighbors participated, was held at the *crèche*.

CHURCHES AND CHAPELS

The church is by far the principal structure in the village (pl. 16, *a*). It is located at one corner of the *praça*. It is about 60 feet long, 33 feet wide, and 25 feet high. Above the roof is a belfry, topped by a dome and a wooden cross. The building is solidly constructed. The walls are about 20 inches thick. Formerly of *taipa*, they were rebuilt with brick in 1881. They are calcimined outside in pale yellow and inside in white with stenciled designs in blue. The central altar is simple in design and supports an image of Nossa Senhora da Penha (Our Lady of Penha) about 4 feet high. A smaller image of Nossa Senhora da Piedade (Mercy) stands in front of the larger image. To the left of the communion rail is a smaller altar, with an image of Nossa Senhora do Desterro (of the Flight [into Egypt]), about 3

²⁴⁶ According to unpublished data taken from the census sheets.

²⁴⁷ Identification of the sects included in this category was not possible at the time these data were obtained. An accompanying statement, however, specified that "no Jews, Positivists, or Free Thinkers are included."

feet high and a smaller image of São Norberto. On a nearby pedestal is an image of Nossa Senhora das Dores (Sorrows). To the right of the communion rail is an altar similar in size to the one opposite and supporting an image of São Bom Jesus da Prisão and a smaller image of Santo Antonio. To the left of this altar is a pedestal with the image of Nossa Senhora das Graças (Grace).²⁴⁸ Between the entrance and the communion rail, to either side of the aisle, are several rows of benches made of rough boards. Overhead, the space is open to the ceiling, which is of wood and painted white. To either side are four archways which open out into side rooms. To the right, in spaces between arches, are images of Nossa Senhora do Rosario (Rosary) and Nossa Senhora da Conceição (Conception). To the left, arranged likewise, are the images of São Tarcisio and São José. In a room beyond the arches are the baptismal font and an altar, supporting a crucifix. In an adjoining room is another altar with an image of Nossa Senhora da Aparecida (Apparition). In a third room, there is still another altar with, below, an image of Jesus reclining in death, enclosed in a glass case and, above, images of Santa Catarina and São Roque. A life-size image of Jesus bearing the cross rests upon a nearby table, whence it is taken out to be carried in the processions of Holy Week. In another room are kept the standards and platforms used to carry the images in procession. To the right of the congregation, there is a stairway which leads up to a small choir loft over the entrance to the church, and also to the belfry. Near the entrance to the stairway, is a room with the confessional and an altar on which are an image of São Benedito and a crucifix. Adjoining this room is the sacristy. Behind the central altar are three unused rooms. Over them are three other rooms, in one of which the *padre* sleeps when in the village.

In front of the church and to one side are usually from one to two *mastros*, as may be seen from plate 16, *a*, together with the *corêto*, a small, square platform with a roof of *sapé*, in which occasionally is held an auction of *prendas* at a religious *feira*. (See Division of Labor, p. 58.)

In the bend of the river several miles to the north of the village is a large chapel (or small

church) in which Mass occasionally is held and, in September, a *feira* for the patron *santo*, Nossa Senhora da Aparecidinha (pl. 16, *d*). To the east of the village, about 7 miles away, on the margin of the community, is a recently restored chapel, originally built in the seventeenth century. About 5 miles to the south of the village is a modest chapel, the successor of one originally built in the same century. A small chapel is located in the village cemetery. Along the roads of the community one often sees smaller wayside chapels with one or more crosses. A chapel of this sort is also located at the edge of the village. Occasionally one of these is large enough for Mass to be celebrated in it, as is done at infrequent intervals at the one located about 6 miles to the southeast of the village. Another is about 5 miles to the north (pl. 16, *g*). Located about a hundred feet from the road, it is around 8 feet long, 6 feet wide, and 8 feet high. The walls are of *pau a pique* and the roof is of tile. The floor is of earth. The front of the chapel is open, there being only a low gate to keep out stray animals. Inside, the walls are calcimined in white, with a wide border of dark red extending up about 15 inches from the floor. Along the rear wall is a rough altar made of odd pieces of board. Above it, three wooden crosses may be seen. The two larger crosses pass through holes cut in the altar and rest upon the floor of the chapel. One is about 7 feet high, with a crosspiece 3 feet long and the other is about 5 feet high, with a crosspiece 2½ feet long. Both are painted blue and are covered with artificial floral pieces, made of red and silver leaves. A white cloth is looped over the larger cross. Between the two is a much smaller cross about 20 inches high, with a crosspiece 11 inches long. It is unpainted. Above the altar is an arch made of strips of *taquara* wrapped with crepe paper and covered with artificial flowers. Stretching from corner to corner of the chapel overhead are streamers made of crepe paper of different colors. To each side of the chapel, outside, are two rude shelters, each with a roof of *sapé* supported on rough poles. The largest is about 15 feet long, 12 feet wide, and 9 feet high; the other is slightly smaller. Between the front of the chapel and the road is a *mastro* around 20 feet high, with the "flag" of Santa Cruz (see Almas and the Santa Cruz, p. 167). Other wayside chapels with crosses

²⁴⁸ Perhaps better known in the United States as Our Lady of the Miraculous Medal.

usually are much smaller, although in some cases the walls are of brick and the floor of cement. At none of these smaller chapels, however, is there a shelter for worshippers.

SACRED FUNCTIONARIES

The present *padre*, as has been indicated, does not live in the village but comes over each Saturday from the seminary in a neighboring town where he teaches during the other days of the week.

He used to ride over on horseback; since the recent installation of the local bus line,²⁴⁹ however, he comes by bus. While in the village, he uses a room in the rear of the church and takes his meals at the *fazenda*, which lies at the edge of the village. He returns to the seminary Sunday evening or Monday morning.

His predecessor was an older man who, until his death about 2 years ago, had lived for many years in the village. He appears to have been an especially able man, well liked and respected throughout the community. "He was a mighty good *padre*," said a villager. "Everyone thought highly of him. He wasn't above talking with anyone, no matter who he was, and at *festas* he always had as good a time as his people." "He never came near you," said another villager, "without stopping to chat a bit."

The present *padre* is a younger man, about 33 years of age. He is somewhat shy and retiring. His failure to participate heartily in *festas* as did his predecessor and, due to being absent during most of the week, to visit about the community with local residents other than a few who assume a prominent role in the activities of the church, is adversely commented upon. "He means well," said a farmer, "but he doesn't seem to be able to put much life into *festas*." "He's a good man," said a villager, "but we don't see much of him except at Mass or in the processions." His youth and lack of effectiveness in public address also reduce his prestige. "He's a good man," said a farmer, "but he's too young." "He fulfills his obligations faithfully," remarked a villager, "but in his sermons and when he reads from the gospels he doesn't have that warmth of expression you like to see."

Each Saturday evening the *padre* officiates at a *reza*²⁵⁰ and each Sunday morning at two Masses. He is also present at the more important religious *festas* and participates in the processions on these occasions. On the "day of the Holy Kings" (Epiphany) he passes through the village, "blessing" the homes of his parishioners and sprinkling holy water in each room. On occasion, he also "blesses" a new house which a local inhabitant has erected and, on Palm Sunday, branches of palm brought in to the church by parishioners.

Three local boys, serving as acolytes, assist the *padre* at Mass and *reza*. They range in age from 9 to 14 years. Each is quite proud of his function.

The *capelão* is a layman who, on request, directs a religious ceremony at a private home, a wayside cross or chapel or at the cemetery, repeating prayers and chanting hymns. A *capelão* in the village knows of 10 other persons in the community who are *capelães*. Nine of these, like himself, are men. Several other persons act as assistants, including a few women. None receives any remuneration at any time. One of them explained:

You become a *capelão* by learning from others. When a small boy, I was always going to Mass and *reza*. My mother also taught me many prayers. My father was a *capelão* and, when he died, my older brother became one. One day, a neighbor asked him to say prayers at his house and I went along to help him with the responses. My brother told me I also ought to become a *capelão*. Not long after that, they were having novenas at the Santa Cruz. I went to see what I could do and I got along quite well. Since that time, I too have been a *capelão*.

On occasion, members of the Apostleship assist the *padre* with religious activities. One of these assumes an especially prominent role in *festas*, especially in arranging the processions. Of her activities, she says:

I decorate all the *andores* (platforms for carrying images) that are used in the processions. And when the time comes, I help get everyone lined up and in order. I put fresh flowers in the church each Sunday and I also decorate it whenever there is a *festa*. At Mass, I take up the offering and sometimes I help read the prayers. When the Bishop came for the christening, the *padre* told me only the Sunday before that he would be here on the following Wednesday. I asked the *padre* "What can be done in so little time?" He said, "Do what you can." Monday, I went to town and bought everything I needed. I came home and made little paper pennants to decorate the streets. I got flowers and put them in the

²⁴⁹ See Transportation, p. 95, and Isolation and Contact, p. 104.

²⁵⁰ See Mass, Reza, and Novena, p. 154.

burch. I also arranged a dinner here at home for the Bishop. I made an enormous white cake with figures, on top, of a chalice and the Host. The Bishop said he didn't have the courage to cut the cake, it was so pretty. He even wept a little before leaving. He said that he was very grateful for the reception that had been prepared for him.

Later when I went to São Paulo to ask him for new settlements for our *padre*, I found the room full of women from the League of Catholic Ladies. Many of them had on huge diamond rings; but when the Bishop came in, he walked right across the room and spoke to me first. I said to him, "So you remember me?" He replied, "Dona Francisca, I am a grateful man, I have not forgotten what you did for me."

About 5 or 6 years ago, a *missão*, composed of four itinerant friars of the Redemptionist order, spent a few days at the village. They are remembered as "very good preachers." Food and shelter were provided by the local inhabitants during their stay in the village. In addition to delivering sermons, they baptized a number of children and performed the marriage ceremony for those who presented themselves.

The roles of the village bell ringer and the *ciloeiro* have already been considered.²⁵¹

SANTOS ²⁵²

The conceptions regarding the saints, disseminated in the community by the ecclesiastical functionaries, vary in no essential detail from the official conceptions of the Roman Catholic Church. When a local inhabitant is asked regarding any particular belief, he usually replies in keeping with the official conception. The approved idea that the image merely represents an actual being, for instance, and is employed to call this being to mind, is reflected in the words of a villager when he said, "The image is to show that in heaven that *santo* exists." Similarly, the idea that there may be several different images to represent the same being according to different "devotions," is reflected in the words of a young mother when she said, "There are Nossa Senhora do Bom Parto (Our Lady of Easy Childbirth), Nossa Senhora da Piedade (Our Lady of Mercy), Nossa Senhora da Penha (Our Lady of Penha), and many others; but all of them are the same Nossa Senhora."

"Jesus was a man who suffered much," remarked a farmer, "and for each suffering there is a way of representing it." The idea that a saint has a universal character and is not to be identified with one locality only, is reflected in the words of a farm woman when she said, "There, in Pirapora, is São Bom Jesus de Pirapora. Here in the village is São Bom Jesus da Prisão (of the Prison) and in Itú [a community several miles to the west] there is São Bom Jesus da Cana Verde (of Green Cane);²⁵³ but all of these are the same *santo*."

Behavior, however, varies considerably from this official conception, with reference to both the image and the saint. There is a rather generalized tendency to act as if each image were identified with a different being. *Promessas* are made, for instance, to Nossa Senhora do Bom Parto, Nossa Senhora do Monte Serrat, and not just to Nossa Senhora. When one inquires of a local inhabitant to which *santo* he is most devoted, a specific representation is usually mentioned; for example, "São Bom Jesus de Pirapora," "Nossa Senhora da Aparecida."

Although, when specifically asked regarding the matter, most local inhabitants will distinguish between image and saint, there is a rather generalized tendency to act as if they were identical. This fact is symbolized in the tendency to use the term *santo* when speaking about the image. "The *santos* which are *mais milagrosos* (work most miracles)," said a farm woman, "are the older *santos*. This is because the newer *santos* are *made*, while the older ones were *found*. Look at São Bom Jesus de Pirapora. He's more powerful than any other *santo*; and he was found on a rock in the river." There is also a widespread tendency to identify a few images of saints with specific localities. "São Bom Jesus de Pirapora is 'of Pirapora,'" said a farm woman. "He is called that because he was found near that town."

In spite of a different conception propagated by the religious authorities, Mary and Jesus are almost universally thought of as *santos* of the same category as St. Anthony, St. John, etc. And, although the idea is rare that the image is God, the idea does exist in the community. A local girl who was asked by the *padre*, "How many

²⁵¹ See Division of Labor, p. 56.

²⁵² The literal translation of this term is "saints." Since, however, the connotation of *santos* is somewhat different, the term is retained in its local form.

²⁵³ "I don't know why he is called that," the informant further said. "It may be because when Jesus was a prisoner, they put a stalk of cane in his hand and made him strike himself in the face with it."

Gods are there?," instead of giving the expected reply as stated in the catechism, said, "At home, my Aunt Chica has one," and explained that in her house there was an image of Jesus crucified. She was called *uma boba* (a fool), however, by a woman in the village. "Everyone should know that Jesus is there in the heavens and the image is only a representation of him."

The official conception that one prays to the *santos* so that they will intercede with the Supreme Deity to obtain from Him the answer to a request, is known rather generally in the community. "If Santo Antonio doesn't help you find what you've lost," said a woman in the village, "it's because God doesn't want you to find it. If God doesn't want you to have something, the *santo* does not ask Him, isn't that so?" Actual behavior almost always implies, however, a different conception. Prayers are usually addressed only to the *santo*, and he alone is held responsible for the failure to obtain that which was desired. Moreover, he is not asked to intercede with the Supreme Deity but himself to grant the favor. *Promessas* are also made directly to the *Santo* and fulfilled only in his name. If a request goes unanswered, sympathetic magic may be applied to the image of the *santo* to force the reluctant response. The image may be taken from the *oratório*, a "hat" which has been made from the comb of "malignant wild bees" put on the "head" and the image hid behind the door. If the desired response continues to delay, the image may suffer other indignities, such as being hung by the neck in a well, held over a fire or, in extreme cases, put into the *pilão* and smashed up.

Treatment of an image in this fashion is censured, however, by many persons in the community. "If you make a *promessa* to Santo Antonio," said an elderly woman in the village, "and he doesn't do anything for you, it's better to keep quiet because, if you don't, he never will listen to you. These people who mistreat a *santo* are no good. *Credo!*"²⁵⁴ What kind of people is it that do things like that."²⁵⁵

²⁵⁴ A shortened form of the Apostle's Creed widely used in the community when one speaks or thinks of that which might harm him and against which he desires protection.

²⁵⁵ The same informant also recalled that "once I was in Piracema and I saw a woman there who had made a *promessa* to Santo Onofre so the man she had been living with would come back to her. But Santo Onofre hadn't listened and so she struck him an awful blow."

As implied in several of the remarks cited above, the tendency is rather generalized to consider the primary function of a *santo* to be that of aiding an individual in obtaining something which he needs or desires. With few exceptions, prayers to him have this objective.

Known and referred to, then, as specific *santos* by the local inhabitants are the following:

Nossa Senhora da Aparecida	São Braz
Nossa Senhora da Aparecidinha	São Geraldo
Nossa Senhora do Bom Parto	São Gonçalo
Nossa Senhora da Conceição	São Jeronimo
Nossa Senhora do Desterro	São João Batista
Nossa Senhora das Dores	São José
Nossa Senhora das Graças	São Lázaro
Nossa Senhora da Guia	São Lourenço
Nossa Senhora do Monte Serrat	São Norberto
Nossa Senhora da Piedade	Santo Onofre
Nossa Senhora da Penha	São Pedro
Nossa Senhora dos Remédios	São Roque
Nossa Senhora do Rosário	São Sebastião
São Bom Jesus da Cana Verde	São Tarcísio
São Bom Jesus de Iguape	Santa Bárbara
São Bom Jesus de Pirapora	Santa Catarina
São Bom Jesus da Prisão	Santa Cecília
Menino Jesus	Santa Luzia
Divino Espírito Santo	Santa Rita
Santo Antonio	Santa Rosa
São Benedito	Santa Terezinha
São Bento	

Also considered as a *santo* by several persons in the community is Antoninho Marmo, a boy who, even before his early death, was thought to possess miraculous power (Willems, 1940). His grave in a São Paulo cemetery is visited each year, on All Soul's Day, by thousands of persons. "They say that once a young man in São Paulo was very sad and disheartened," remarked a farm woman. "He was out of work. One day as he was leaning up against the wall of Consolação cemetery, Santo Antoninho Marmo suddenly appeared there among the flowers. He asked him why he was so sad. The young man replied that he had no money and could not find any work to do. Then Santo Antoninho said to him, 'Go to such-and-such a place and there you will find work.' He went to that place and, sure enough, he got a job." In lieu of images, photographs of the boy are employed and are to be seen in many homes of the community.

The *Divino Espírito Santo* (Holy Ghost), represented as a dove, is thought of as a *santo*, although there is no "cult of the Divino" as is to be

found in certain other communities of Brazil. The *anjo da guarda* (guardian angel), which each person is presumed to have "to protect him from all harm," is also considered a *santo* by at least some of the local inhabitants. "He's just like all the other *santos*" remarked a woman in the village. "Like São Benedito and Santo Antonio." "Every night," said a young mother, "I pray to the guardian angel and all the other *santos*." The guardian is represented as an angel, with wings spread, hovering near a child which is sometimes pictured as in danger of falling over a precipice. Occasionally, an image, made of metal, is employed. "It's a good thing to hang up in a truck," said a woman in the village. "It protects you from all harm."

One of the more popular *santos* in the community is São Benedito. "All the *santos* work miracles," said a young farm woman, "but in these parts people make many *promessas* to São Benedito." The image is black and the *santo* is referred to as a *preto* (black).²⁵⁶

Several persons indicated their preference among the *santos* as follows:

I pray to all the *santos*, but especially to São Benedito and Santo Antonio.

I like best São Bom Jesus de Pirapora. He's a great miracle worker.

I pray to all the *santos*; but here in our house we especially like Nossa Senhora da Aparecida, Nossa Senhora do Bom Parto, Nossa Senhora do Monte Serrat, and Nossa Senhora da Guia.

We in our family like Nossa Senhora da Aparecida very much. She is the best worker of miracles.

I have faith in all the *santos*; but I go especially to São Benedito for help.

Santo Antonio is my favorite; you ask him for something and he gives it to you.

I pray to all the *santos*, but for me São Bom Jesus de Pirapora is the best miracle worker.

My advocate is Nossa Senhora do Monte Serrat; I also am devoted to São Braz and Santo Antonio and I pray to the Guardian Angel, too.

I prefer São Bom Jesus de Pirapora and São Benedito.

I was named for Santo Antonio. If you ask him for something, he takes care of you right away.

I pray more to "Santo" Antoninho Marmo.

Reference has already been made to the images in the village church (see Churches and Chapels, p. 144). In the large chapel to the north of the village, an image of Nossa Senhora da Aparecida, enclosed in a glass case, occupies the central

place on the only altar. In front and a little to one side, is an image of São Geraldo and, opposite, on the other side, one of Santa Terezinha. On wooden supports, located at intervals around the walls, are images of São Benedito, São Roque, Mary with the infant Jesus in her arms, and Santa Rita. At the feet of the latter are a number of photographs taken in the *Casa dos Milagres* (House of Miracles) at the shrine of São Bom Jesus de Pirapora, in the town of Pirapora. In a small room to the left of the altar, is another image of São Benedito.

At the chapel several miles to the east of the village, an image of Nossa Senhora da Conceição, about 30 inches high, occupies the niche on the only altar, with a smaller image of São José on one side. Resting on the floor, one at each end of the altar, are figures identified locally as representations of Adam and Eve, which apparently once served as altar supports (pl. 16, *e*). On a small table in front of the altar are images of Jesus, Nossa Senhora da Aparecida, São Benedito, Santo Antonio, Santa Cecilia, Santa Rosa, Santa Terezinha, and São Bento. On one wall are lithographs of Nossa Senhora da Conceição and Santo Antonio; on another wall is a lithograph with the inscription, "the true and only picture of the Virgin of the Highway of Leon." On a small table nearby is another lithograph with the inscription, "the true and only picture of São Bom Jesus de Pirapora." On the main altar in the chapel about 5 miles to the south of the village is another and larger image of Nossa Senhora da Conceição.

Each image in the church in the village and in the various chapels of the community belongs to the respective sanctuary. No image is the personal property of a local resident who has placed it in the church, or one of the chapels, while retaining actual ownership of it.

Of special significance are the household images referred to locally as "the *santos* here in the house." All have been acquired by some member of the family, living or deceased, either by purchase or as a gift. The act of acquiring an image, however, is never referred to as a "purchase;" to employ this term is considered "disrespectful." *Troca* (exchange) is used instead.

Shortly after being acquired, the household image is taken to the village church to be blessed by

²⁵⁶ The image of Nossa Senhora da Aparecida is also black.

the *padre*. Should the family also be giving a *feira* in honor of the *santo* in question, as occurred recently with reference to Santo Antonio, the members of the family, together with their relatives and friends, may form a procession to carry the image back to the house. The image is then placed in an *oratório* which usually is located in the principal room but sometimes is in the bedroom. Nearly all the *oratórios* are of wood, relatively small and crudely made. Rarely is one as pretentious as that in the house of a villager, which "was carved with a penknife, in the time of the Jesuits."²⁵⁷ It stands about 5 feet high and is 2 feet wide and 14 inches deep. The form of the front portion is rectangular while, at the back, the upper part is semicircular in shape. The lower half of the inside walls is covered with flowered paper and the upper half with silk, on which the figure of a dove has been embroidered to represent the Divino Espirito Santo. On a raised platform is a small image of São João and three images of doves. Two bouquets of artificial flowers, white and rose-colored, are also on the altar.

More commonly, however, house *oratórios* are similar to that in the farm home of Seu Antonio. Built many years ago by a neighbor who was handy with tools, it has the form of a small house about 20 inches high, 10 inches wide, and 6 inches deep. It is made of wood, unpainted and darkened with age. The front wall is composed of two doors on hinges, held shut by a small wooden clasp which turns on a nail. Crowning the roof is a small cross set into the wood. Inside the *oratório* are images of Nossa Senhora da Aparecida, São Gonçalo, and São Bom Jesus de Pirapora. In a wooden frame about 6 by 4 inches, set on a table in front of the *oratório*, is a photograph of Antoninho Marmo. In this house, as often occurs, the *oratório* is attached to the wall; in about an equal number of cases, however, it is placed on a small table.

Candles are burned in front of the images at regular intervals, as well as on special occasions. Many families, if unable to attend Mass, light a candle at the hour it is being held. Some families

burn one every Monday. A candle may also be lighted upon the occasion of making a *promessa*.²⁵⁸ Some families used to press oil from castor-beans to burn for this purpose. A wick was made of cotton and placed, together with the oil, in a small vessel.

Formerly, in some families, the faces of the images were covered "against any evil deed done by a member of the household." "My mother," remarked the wife of a village official, "would always cover up the *oratório* when one of us children had done something we should not have done. She would say, 'The *santos* don't want to see you today. You have been very bad.'"

Although an image may be hung from the bed of a child or other unmarried person, it must never be hung from the bed in which a man and a woman sleep. "*Num presta*" (It will bring evil effects of a magical character), say local inhabitants. "They will have bad luck. Nothing will go right." The image may be kept in the bedroom, however, if placed in an *oratório* or on a small shelf attached to the wall.

As has been indicated, one often sees colored lithographs of *santos* on the walls of local houses. At several farm homes visited, for example, the following lithographs were observed:

Farm 1.—On the wall of the front room: Nossa Senhora do Rosario, São Bom Jesus de Pirapora, São Roque, São João, São Norberto, Nossa Senhora do Bom Parto, Santo Antonio, Nossa Senhora da Aparecida, Nossa Senhora da Guia, São Benedito, Nossa Senhora do Monte Serrat and Jesus on the Cross. On another wall: Nossa Senhora dos Remédios.²⁵⁹

Farm 2.—On the wall of the front room: São Bento, Santa Bárbara, Nossa Senhora do Bom Parto, São José, Santa Luzia, Santa Catarina; together with a hand of Jesus, showing wounds.

Farm 3.—On the wall of the front room: São Bom Jesus de Pirapora, São Bom Jesus de Iguape, Nossa Senhora da Aparecida, Mary with the infant Jesus in her arms.

Farm 4.—On a wall: São Bom Jesus de Pirapora, Santo Antonio, Nossa Senhora da Conceição, and Antoninho Marmo.

Farm 5.—On a wall of the front room: Nossa Senhora das Dores, the Sacred Heart of Jesus and the Sacred Heart of Mary.

The *santos* are ordinarily thought of as possessing human feelings and sentiments. São Benedito,

²⁵⁷ A local expression which is used rather loosely and, in fact, means merely, "long ago." As previously indicated, the Jesuits owned a farm in the community in the eighteenth century. (See *Roots in the Past*, p. 9.)

²⁵⁸ See *Promessas*, p. 173.

²⁵⁹ "When my granddaughter was ill," said the grandmother, "I made a *promessa* to get a Nossa Senhora dos Remédios if she got well."

for instance, is said to be quite sensitive and easily offended. "After a *reza* or Mass, we go to visit São Benedito first," said a farm woman. "And when we have a procession in which he goes out with other *santos*, São Benedito is always carried in front; for if he isn't, the procession will have to be given up. He will make it rain, or something. He's very sensitive." São Gonçalves is thought to be fond of dancing. At a *feira*, it is said, "he unties the legs." "São Gonçalves is a gay fellow," said a farm woman. "Haven't you noticed he always carries a little *violão*?"

Certain *santos* are thought to be especially efficacious with reference to specific requests. Santo Antonio, for example, is called upon to assist young women to marry. He is also thought to be "the *santo* of lost things," as a grandmother put it. "He helps you find what you lose." São Gonçalves is called upon to assist widows and older women to marry. "*Santo Antonio fais achá,*" said an older woman in the village, "*e São Gonçalves fais casá.*" (Santo Antonio finds things for you and São Gonçalves gets you married.) "It does no good for a young girl to ask him though," said an elderly woman, "because he won't listen to her; only to an older woman." Then she added:

São Gonçalves do Amarante
Casamentero das veia
Fazei casá as moça
Que mar fizero ela? ²⁶⁰

São Gonçalves is considered to be the "protector" of players of the *violão*, of domestic animals, and of planted crops. He is also thought to be especially efficacious in healing diseased or injured legs. São Bento is said to protect especially against snakes. "When you go into the timber," said a villager, "it's good to ask São Bento to protect you." São Sebastião and São Roque are thought to protect especially against smallpox, "or any contagious disease in either men or animals." São Jeronimo and Santa Barbara "protect against lightning." "But you must not call upon both of them at the same time," said an elderly woman. "People say they are married and don't get along very well. If you call on both of them, the lightning will destroy everything."

Of great significance in the community, is the widely held conception that all *santos* aid in illness. "The *curandeiros* 'make prayers,'" said a young mother. "But it is the *santos* who cure. If you have faith, they 'do the miracle.'"

To the image of Nossa Senhora da Conceição, which occupies the main altar in the chapel about 5 miles to the south of the village, is attributed miraculous power to bring rain in time of drought. Since, to farmers dependent upon moisture for their crops, rain is an absolute necessity, any prolonged drought is an extremely serious matter. When rain completely fails, the image is taken from the chapel and brought, in procession, to the village and kept there until it rains. Although the *padre* does not hold the idea, it is widely believed that the *santa* will cause it to rain "since she does not want to be away from her chapel and she knows that only by making it rain will she be returned to it."

On November 23, 1947, for instance, after many weeks without rain, a number of local inhabitants, led by the *padre*, went to the chapel and brought the image in procession to the village. Behind the *padre* and a little to each side, walked an acolyte. Behind each acolyte came a column of children, followed by a column of girls and women. Then came the image, carried by four men and followed by the other men walking in a group. About 200 persons were in the procession. The sun was blazing in a cloudless sky.

After entering the village, the procession made its way to the church, where the image was placed at the side of the altar. The building was soon filled and many persons stood outside the open doors and windows. Almost all countenances revealed attitudes of reverence and respect. In the *ventas*, later that day, and wherever farmers and villagers gathered, conversation was almost entirely given over to accounts of the procession and to voicing the expectation that a miracle was soon to be performed. "This *santa* really brings rain," remarked a farmer. "What is needed, though, is faith. If we have enough faith, we will get rain." "Last year, remember?" recalled a villager. "She saved the crops. And she'll do it again this year. I'm sure."

Villagers and farmers were awakened the next morning by the sound of rain falling. It continued throughout the day and on into the evening.

²⁶⁰ São Gonçalves do Amarante,
Matchmaker for old women,
Help the girls get married too!
What harm have they done?

On every hand, one heard joyous comments. "Do you see what a miracle-working *santa* we've got?" proudly asked a villager. "Our *santa* is a strong *santa*," said another. "If you want it to rain, all you have to do is to ask, and look at it rain! The ground is already soaked." "If I'm not mistaken," remarked another villager, "It hasn't rained in Piracema. They ought to take the *santa* there too."

The following account of the event, given later by a young man living on a farm near the village, reflects common ideas and attitudes:

Us farmers were needing rain badly. The beans were all turning yellow. So last Sunday we went to the chapel where Nossa Senhora da Conceição is kept and carried her to the village. Whenever we have a drought, it's our custom to go and get her and put her in the village church. And then it is sure to rain. This time it came earlier than usual. Some years the drought lasts nearly 6 months and it won't rain a drop until we go and get her. The life of a farmer depends on rain. If we don't get it, we're "done for." It's for this reason that we have such faith in our Nossa Senhora da Conceição.

There is some confusion in the minds of local residents regarding the *padroeira* (patron saint) of the village. Although the *padre* and other religious leaders, as well as most of the older inhabitants, identify the *padroeira* as Nossa Senhora da Piedade and each year a *festa* is held in her honor during which she is referred to as the *padroeira* of the village, some persons in the community say that Nossa Senhora da Penha is the patron saint. In support of this contention, they point to the fact that the image of Nossa Senhora da Penha occupies the principal place on the main altar of the village church. Others say that Nossa Senhora da Piedade used to be the patron saint but that sometime in the past she was substituted.

The confusion seems to have its origin in events which took place many decades ago and have largely been forgotten. As has been indicated, a chapel in honor of Nossa Senhora da Penha was erected in 1701 at the place where the village now stands. Somewhere else in the community, probably at a point about a mile away now known as the *Freguezia Velha* (the Old Parish), there once stood a chapel which had been erected in honor of Nossa Senhora da Piedade, although all evidence of its existence has now disappeared. Sometime in the past, the principal image in this chapel was brought and placed on the main altar in what is

now the village church. Late in the last century, the *padre* at that time living in the village had the present image of Nossa Senhora da Penha made in France and brought to Brazil and placed in the central position on the main altar. The smaller image of Nossa Senhora da Piedade, as has been indicated, now occupies a position on the altar, in front of this image. Some persons in the community maintain that the village has not grown to be larger because of the fact that, although (according to them) Nossa Senhora da Piedade is the patron saint, the image of Nossa Senhora da Penha is larger and occupies a more prominent position on the altar.

RINGING OF THE BELLS

In the belfry of the village church, there are three bells, each slightly different in size. They are rung by the village bell ringer²⁶¹ on numerous occasions throughout the year. At midday each Saturday and also at 6 o'clock that evening, they are rung, as villagers say, "to announce the arrival of the *padre* in the village" to officiate at the regular weekly ceremonies. A half hour later they are again rung to remind villagers of the evening *reza* and this is repeated at 7:30, when it is time for the *reza* to begin. They are heard several times on Sunday morning: an hour before the early Mass and again a half hour later; a third time as the Mass begins; and at stated intervals during the Mass itself, when the chiming of one or more bells becomes a part of the ritual. The same routine is repeated for the 10 o'clock Mass. The bells are also rung at midday. They are heard each evening in May and June, when special *rezas* are held. On the occasion of a *festa*, they are rung on the preceding evening and also early in the morning, to announce the *festa*. They are again rung during the *festa*, as the images are carried out of the church in procession and again, later, as they are carried back into the church. They are rung each morning during novenas. At funerals, if the deceased is an adult, the large bell is tolled, slowly, in funeral rhythm; if a child, the smaller bell is made to chime. This continues from the time the body leaves the church until it is carried into the cemetery at the top of the long slope that leads up from the village. As has been indicated, the bells are also rung on special occasions like that of the

²⁶¹ See Division of Labor, p. 58; also pl. 9, a.

arrival of the first bus in the village and of the news of the German surrender in the last war.

MASS, REZA, AND NOVENA

"The principal hour of religion," said a villager, "is the hour of the Mass." At 7:30 and again at 10 o'clock each Sunday, as has been indicated, Masses are held in the village church. The 10 o'clock ceremony is the regular parish Mass. The earlier one is sometimes said for the soul of a deceased person.²⁶²

At the 7:30 Mass there is communion but no sermon or singing. At the 10 o'clock Mass on a recent Sunday, following the preliminary rituals common to the Roman Catholic Church, the *padre* read the "Gospel for the First Sunday of the Forty Days (Lent)" in which the fasting of Jesus "during forty days and forty nights" and "the temptation in the wilderness" are recounted, and commented upon this passage. The *padre* then said:

My dear brethren, "the Gospel of the First Sunday of the Forty Days" affords us a lesson from which we all can learn. When Satan tempted Jesus during his fast, Jesus could have yielded for he is Lord of Heaven and Earth and has power to transform stones into bread. But if he had done so, the lesson which he wished to give to the world would have been lost. So he rebuked Satan, saying, "Man does not live by bread alone but also by the Word that comes from God." My dear brethren, there are persons who, although they work without ceasing, from morning until night, still live in want. They should not, for this reason, however, allow themselves to be tempted and to leave the way of God. Because it is not only by bread that man lives but also by the Word of God. Our life here in this world, my dearest brethren, soon passes away. Our purpose in this life is to gain heaven which is our permanent dwelling place. We should never let Satan tempt us with the things of this world. Riches are worth nothing if we leave off worshiping God. We cannot take them to the other world; everything must remain here. When the rich man dies, he may have a coffin which is very fine but it is put beneath the ground and consumed by it like any other. To gain heaven we need to repel the temptations of Satan as Christ taught us to do, saying: "Get thee hence, Satan, for it is written, Worship the Lord thy God and Him only."²⁶³

Most attendants at Mass are adults, adolescents being fewer than their percentage in the total population. At a recent Mass, for instance, 54

percent of those present were adults, 30 percent small children, and only 16 percent adolescents. Women and girls ordinarily attend Mass in greater percentages, and men and boys in lesser percentages, than their actual distribution in the population. Of 95 persons present at the 10 o'clock Mass on a recent Sunday, for instance, 32, or one-third, were men and boys, 63, or two-thirds, were women and girls. Of the 78 persons present on another occasion, 39 percent of the adults were men, 61 percent were women; 30 percent of the adolescents were boys, 70 percent were girls. The children were about evenly divided as to sex. At Masses held on Sundays immediately preceding Christmas, however, on Palm and Easter Sunday, and during other special seasons in the year, especially at the 10 o'clock Mass, the men and boys are present in larger numbers so that their percentages in the congregation are more in keeping with their distribution in the population. These various data are indicated in tables 13 and 14.

TABLE 13.—Attendance at 7:30 Mass, by age and sex groups, village church, Cruz das Almas, six Sundays during November and December, 1948 and January, 1949

Age group	Sex group—masculine						Percent of total
	Nov. 14	Nov. 21	Dec. 5	Dec. 12	Dec. 26	Jan. 9	
Children.....	6	10	6	4	3	3	15.4
Adolescents.....	3	2	2	2	1	2	4.8
Adults.....	2	2	12	13	7	9	21.6
Total.....	11	14	18	19	11	14	41.8

Age group	Sex group—feminine						Percent of total
	Nov. 14	Nov. 21	Dec. 5	Dec. 12	Dec. 26	Jan. 9	
Children.....	10	12	2	2	2	9	17.8
Adolescents.....	1	5	4	1	—	5	7.7
Adults.....	7	5	15	16	14	11	32.7
Total.....	18	22	21	19	16	25	58.2

blessing. God blesses the hands of the worker and this blessing extends to his house and his family. No one should despise the man who works the land. He struggles from early in the morning until late at night to support his family and to rear his children. This is noble and praiseworthy. He who does no work deserves nothing. There are, however, two kinds of work: physical work and spiritual work. We should not think only of doing physical work. We should think also of our souls. Of what value are earthly goods if one's soul is lost? We should try to come closer to God because when we die we can take no earthly goods with us but only the fruits of our spiritual work. The soul is very precious. We all know how to purify it; humility, chastity, patience, and resignation are the virtues which we should cultivate. Everyone should also come to Holy Mass and observe the sacred Sacraments. This is the road to eternal life. It will take us to Paradise. For the sacrifices we make in order to serve God, we one day will receive a well-deserved reward. Those who receive no reward on this earth, will receive their reward in heaven."

²⁶² The fee, in this case, is 10 cruzeiros.

²⁶³ In a sermon at another Mass, after reading from the Gospels the parable of the workers in the vineyard, the *padre* said, "Work gives man dignity. It is not a punishment from God; it is a

TABLE 14.—Attendance at 10:00 o'clock Mass, by age and sex groups, village church, Cruz das Almas, four Sundays during November and December 1948

Age group	Sex group—masculine				
	Nov. 14	Nov. 21	Dec. 12	Dec. 26	Percent of total
Children.....	19	11	3	3	15.3
Adolescents.....	6	4	1	12	9.7
Adults.....	5	3	25	25	24.6
Total.....	30	18	29	40	49.6

Age group	Sex group—feminine				
	Nov. 14	Nov. 21	Dec. 12	Dec. 26	Percent of total
Children.....	16	8	10	11	19.0
Adolescents.....	5	1	4	5	6.4
Adults.....	10	4	23	22	25.0
Total.....	31	13	37	38	50.4

Of 17 farms visited, the occupants of 2 rarely miss a Mass, those of 12 farms attend irregularly, and those of 3 farms go to Mass only on special occasions, such as those on which there is a *feita*. "All in our family," said one farmer, "attend Mass every Sunday. It is important to do that." "It's foolish to go to Mass every Sunday," another farmer said, expressing a different attitude. "You can have religion in your own home, can't you?"

The best clothes owned are worn to Mass. An occasional woman may wear a cheap silk or rayon dress and an occasional man or boy a lightweight suit of wool. The more common garments have been indicated in the section on Dress. Everyone except small children wears shoes. All persons are clean and neat, with hair carefully brushed.

Each Sunday a four-page pamphlet, about 7 by 10 inches in size, called *O Domingo* (The Sunday), is distributed free at the 10 o'clock Mass. It is published in São Paulo. In the issue of May 9, 1948, for example, the first page was given over to a reproduction of a painting of Mary and the infant Jesus. Printed across the two inner pages were a brief passage from the Gospels, with comments; a brief article entitled, "Is Spiritualism a Religion? No. Neither is it a Science"; a sermon of about a hundred words in length; a notice to the effect that any young man who might wish to become a priest would be welcome at the Seminary in São Paulo; and a statement asking for funds to aid students studying for the priesthood.

On the last page were a few paragraphs from the catechism; a brief account of the building of a Catholic Church in the city of Porto, Portugal and a story of a nun who gave a blood transfusion to save the life of the man who had killed her father.

The term *reza* means, literally, *prayer*. It is employed, however, in three senses: (1) to refer to meetings in the village church, especially on Saturday evening, at which the *padre* usually is present and officiates; (2) to refer to gathering at small wayside chapels and in private homes at which the *padre* is not present and one or more *capelães* lead the prayers, some of the folk idea regarding which may not be sanctioned by the ecclesiastical authorities; and (3) to refer to private prayer, either inside the church or elsewhere.

A *reza* is held in the village church, regularly as has been indicated, each Saturday evening. From 30 to 50 persons usually are present, most of whom are women and girls, a few of whom are men and boys. Several of the men arrive after the *reza* is under way and remain standing in the rear of the church near the door.

Usually the *padre* preaches a short sermon at the *reza*. On a recent Saturday evening, for example, he said:

The "Forty Days" (Lent) begin next week. It is time of penitence and prayer which precedes the most important *feita* of the Catholic Church, that of Easter—a time of preparation of the soul for Easter communion in obedience to the command of the church to take communion at least once every year. It was not because He liked to do so that Jesus became a prisoner in the Host; it was for the love of souls that He gave His apostle the power to transform the Host into His body. At the Last Supper, He took a piece of bread and said to His apostles. "This is My body, eat this in remembrance of Me." Ever since that time, the miracle of the transformation of the Host is performed daily. At the beginning of the Mass, it is bread and after its consecration it is His actual body. Christ is present in the Host; but we do not see Him with the eyes of the senses, only with the eyes of the soul. We must receive with dignity the body of Christ. It is for this reason that our souls must be free of mortal sin. We must make a full confession before we partake of His body. The women should present themselves at communion decently dressed, with the head covered, and very respectful. After Jesus has entered into our bodies we should pray to Him. The best preparation we can make for the day of Easter is to take communion as many times as we can; if possible, every Sunday. Just as our bodies need food to strengthen them and to preserve them from illness, so our souls need food to strengthen them spiritually and to preserve them from

iritual illness. How often, by reason of the carelessness of their parents, one sees adults who still have not taken their first communion. They are not interested in giving food to their souls; they are only interested in food for their bodies. My brethren, let us all take communion so that Christ Our Lord can say that all the people of the village have received Him in their hearts.

The term "novena" originally referred to nine consecutive days of *rezas* in honor of a given *santo*.

It has now been generalized locally, however, to refer to a series of consecutive *rezas*, held in honor of the same *santo*, even though the number may be less, or more, than nine; and also to refer to any one of these *rezas*. The evenings in April are given over to a novena for São Benedito; those in May, to a novena in honor of Mary;²⁶⁴ those in the month of June to a novena in honor of the Sacred Heart of Jesus, and those in October, in honor of Nossa Senhora do Rosário. Every evening in March used to be given over to a novena in honor of São José; today, however, the period of time is considerably less. Novenas are usually held in the village church, sometimes at wayside chapels. A procession occasionally becomes part of the ceremony, setting out and returning from the church, or chapel, in which the novena is being observed.

Special novenas are sometimes held. The last one occurred a few years ago, during World War I, and was dedicated to "stopping the war." Each day for 9 consecutive days Nossa Senhora Aparecida, which is the patron saint of Brazil, was carried in procession, accompanied by a large number of people, "praying and carrying candles." Everyone took part," recalled a farm woman, "because everyone was anxious for the war to be over. There was no more kerosene. And when we went to buy salt in the *venda*, you got only a very little bit. The novena was the idea of the *padre* and also of the people; it was the idea of all." "And it worked," added another woman. "For the war stopped."

Rezas are also held at private homes, led by a *capelão*. On last Twelfth Night, for instance, a *capelão* was asked to come to the home of a farmer and lead the following prayers:

Senhor Menino (sung).

For the soul of the farmer's deceased father.

For all the *santos*.

For the souls of those devoted to Senhor Menino.

For the Santa Cruz (sung).

"We might have sung each one of them," said the *capelão*, "but that takes a lot of time and it's more difficult. So we sang only two and prayed the other three. Even then it took us an hour and 20 minutes."

On the seventh day after the death of a young man in the community, four *capelães* held a *reza* for the deceased at the home of his widow. In the front room, a white cloth had been spread over a chair near the wall and, on top of it, two small images of *santos* and a small crucifix, about 4 inches high, together with a vase of flowers and a lighted candle, had been placed. In front of the chair, a reed mat had been extended on the floor on which the *capelães* might kneel during the ceremony. The prayers included a *ladainha* (Litany), a *terço* (a third of the Rosary), and a hymn, *Senhor Amado*, during the singing of which everyone present, including several men and boys who were standing outside the house, knelt. About 15 women, girls, and children were in the room with the *capelães*, while outside were about a dozen men and boys.

One of the *capelães* says that there are six *rezas* which he most often uses: *Deus vos salve* (God bless thee), *Santíssima Trindade* (the Most Holy Trinity), *Salve Rainha* (Hail, Holy Queen), *Regina, Oferecimento*,²⁶⁵ and *Senhor Amado*. The *capelão* says that the latter is prayed only for the dead, unless especially requested under other circumstances. "It is a very strong (*muito forte*) prayer. Whoever prays it, is freed from every peril." *Rezas* occasionally used by this *capelão* also include "the *Glória da Virgem*, *Oração do Bendito*, *Oração de Jesus Cristo Poderoso* and those for the Guardian Angel, the Santa Cruz and Senhor Bom Jesus do Bomfim."

Many persons in the community pray regularly in private. "I pray a great deal," said a farm woman. "My son sometimes says, 'It isn't good to pray so much.' But I tell him, 'It's true that it isn't good to pray without faith, but I always pray

²⁶⁴ On the last night of the month, a special ceremony is held, known as the *coroação da santa* (crowning of the saint). A group of 10 girls, from about 5 to 12 years of age, dressed all in white and with wings to represent angels, goes up to the altar and puts a crown upon the "head" of the principal image in the village church. The sanctuary usually is crowded for the ceremony.

²⁶⁵ The *capelão* identified this prayer as "six or seven repetitions of the Lord's Prayer or Ave Maria, as the person wishes; I pray it either for the salvation of a soul or following a prayer to the *santos*."

with faith.'” Private prayers almost always take the form of specific requests, especially for aid in illness or other personal crisis. Protection is also a prominent theme. “They say you should pray when you get up, before each meal, at noon and at night,” said a farm woman. “In the morning, to protect you from every peril, a snake, or anything like that; before meals, to give thanks for the food you are having and also to make certain you will never be without food; at noon and at night, to protect your body and to keep it from all harm.” With a few exceptions, prayers are addressed to the *santos*, either to a specific *santo* or, occasionally, to all the *santos* jointly. “I pray to all the *santos* at the same time,” remarked a farm woman, “because it’s easier.”

Many mothers teach their children to pray at night before going to bed. The children of a few families pray every night, others more irregularly. “Ever since I was a small boy,” said a man in the village, 32 years old, “I haven’t been able to sleep well without saying my prayers. When I remember to say them, I’m asleep in an instant. But if I go to bed and forget them, I keep waking up, startled, wondering what is the matter.”

CONFESSION AND COMMUNION

Two rituals in which initiative lies largely with the individual are confession and communion. Confession usually precedes communion and consists in relating in private to the *padre*, who is seated in the confessional within hearing distance but unseen, sins of commission or omission and receiving through him absolution. After 12 o’clock that night, no food or drink must be taken until communion. For this reason, the sacrament ordinarily is observed at the 7:30 Mass, rarely at the 10 o’clock Mass, although an opportunity to take communion is always offered at that time also. Communion consists in accepting from the hand of the *padre* a wafer which, after being consecrated, is thought to become the actual body of Jesus, and whose acceptance on the part of the worshiper “puts him in a state of grace,” in which “there is neither sin nor a sense of sin.”

The wafer is received as the individual kneels before the communion rail at the front of the church. If the worshiper is a woman, the head is covered by a veil, white for virgins, black for married women. If a woman does not own a veil

or for any reason fails to have one with her at Mass, she may borrow from a friend. If an unmarried girl loses her virginity, she is expected henceforth to use a black veil.

Confession ordinarily is heard by the *padre* after the Saturday night *reza*. It may also be heard immediately preceding the ceremony on Sunday. The expected behavior from the point of view of the church, as stated by the *padre*, is to take communion “as frequently as possible,” but in any case “at least once a year.” This expectation extends to all persons in the community who have reached “the age of reason,” which is considered to be about 7 years, and who have been trained in the catechism.

The number of persons confessing and receiving communion at the village church, in any given week, however, is relatively small, considering that there are more than 2,000 persons in the *distrito* for whom the only regular opportunity is that afforded in the village. At the 7:30 Mass on February 22, 1948, for example, only 12 persons took communion. Of these, three were women and four were adolescent girls; three were men and two were adolescent boys. Three of these had made their confession immediately before the morning Mass and the other nine after the *reza* of the preceding evening. At the 7:30 Mass, on December 5 of the same year, 21 persons took communion: 3 men, 8 women, 5 boys, and 5 girls. On the succeeding Sunday, one woman and one man took communion. At the special midnight Mass on Christmas Eve, 42 persons took communion including 20 women, 5 men, 13 girls, and 4 boys. On the following day, which was Sunday, 6 women and a boy took communion; and on the subsequent January 9, 2 women and 3 girls.

The attitudes with reference to confession and communion vary considerably. “I take communion every 2 weeks, regularly,” said a young woman. “One should never fail to do that.” “Confession relieves you of sin,” said a villager 36 years old, “and the taking of communion afterwards, strengthens your spirit.” “I think we should be careful to confess and to take communion,” said a 15-year-old girl. “I do so, regularly, once or twice every month.”

On the other hand, another villager remarked “I’ve never confessed nor do I want to confess. The *padre* can’t forgive you anything.” “In con

fession, you have to recall the past," said a farmer, 46 years old, "the good things you've done and the bad things. But I never tell anyone what I've done, not a single soul." "This business of confessing is not for me," said another villager, 62 years old. "Why should I be telling things to another man?" "I'm a Catholic but I don't go to confession," remarked a 23-year-old farm woman. "That is nonsense (*bobage*)." "I've confessed only twice in my life," said another woman, 32 years old, "when I took my first communion and when I was married. My oldest son (15 years old) has confessed once: when he took his first communion. He was 13 then. Neither my daughter (12 years old) nor my younger son (10 years old) have taken communion yet." "The only time in my life I've confessed," said another farm woman, "was when I got married. That was 7 years ago." "Whenever I can," said an elderly woman who lives near the river several miles from the village, "I go to Mass. But to confess—that's another thing. You should confess your sins only to the Father in Heaven; isn't that so?"

RELIGIOUS FESTAS

The principal *festas* of a religious character which are held annually in the village are those of Semana Santa (Holy Week), Nossa Senhora da Piedade, Santa Cruz, São Benedito, São José, Santo Antonio, São Pedro, and São João. Two important *festas* are also held each year in the nearby countryside: one at the chapel of Nossa Senhora da Conceição, the *santa* thought to be especially efficacious in bringing rain;²⁶⁶ and the other at the chapel of Nossa Senhora da Aparecida near the river to the north of the village. In addition, local inhabitants participate each year in two *festas* outside the community: that of São Bom Jesus de Pirapora which draws celebrants to the town of Pirapora from all over the region; as well as the *festa* of São Roque which is held in the town of São Roque.

The principal function of the *festa* is to renew periodically the common life of the community. A considerable portion of the population attends. The process of communication is intensified. Local inhabitants meet relatives, friends, and other acquaintances, some of whom may live so far away

from each other, in terms of the means of transport, that they are able to meet only occasionally during the year. At *festas*, they exchange conversation regarding their common interests and common problems, their hopes, fears, plans, successes, and disappointments. Each person thus comes to share more fully in the experiences of all the others. By participating in the common acts of the *rezas*, Masses, and processions, the auctions of *prendas*, the raising of *mastros* (see below), the setting off of fireworks and, on the occasion of certain *festas*, the dancing, the playing of games of chance, and the drinking together, common attitudes and sentiments are reenforced, the sense of belonging together strengthened, and solidarity increased.

A not insignificant function of the *festa* is also to bring together young men and women of marriageable age and thus to foster the process of choosing and obtaining a mate. This function is reflected in the following remarks of a young man, 19 years old, after attending the last *festa* for Nossa Senhora da Piedade:

Yesterday, *diverti muito, namorei bastante* (I had a great time with the girls). I bought them pastries and other things. I walked with them a lot. I was having so much fun that I forgot to go home when it was time to do the chores. There were so many pretty girls at the *festa* that I could have kept on talking to them for hours.

For each *festa*, a group of persons, known as *festeiros*, either are appointed by the *padre* or themselves assume the obligation of helping prepare for and carry out the several activities. Formerly, they were only men; today, however, women often participate. Children sometimes are named, or otherwise accepted as *festeiros*, the parents in such cases being responsible for the discharge of the obligations involved. Each *festeiro* is assisted by relatives and friends, so that, in one way or another, virtually the entire village and a considerable portion of the farming community eventually are mobilized.

Other roles exercised in carrying out a *festa* are those of the bell ringer, who rings the bells in the village church to "announce" the celebration itself to the countryside, to call worshipers to the *reza* or the Mass held as a part of the *festa*, and to "salute" the procession as it sets out and as it returns to the church; the *padre*, who participates especially in the *reza*, Mass, and procession; the *fogueteiro*, who prepares and sets off the fire-

²⁶⁶ See Santos, p. 151.

works; the auctioneer, who sells the *prendas*; the members of the village band and the singers; and those persons whose tasks are to set up the booth where the auctioneer will work to decorate the *andores* on which the images are to be carried in procession, to arrange flowers and other decorations for the church, and to raise the *mastro*.

Approximately 2 weeks preceding the date set for a *feira*, invitations are given out by the *festeiros*, most often orally but sometimes by way of printed forms arranged in Boa Vista, inviting relatives and friends to participate and to furnish *prendas* to be auctioned off at the *feira* so as to reimburse the *festeiros* for the cost of preparing it.²⁶⁷

Among the expense of a *feira* may be 180 to 350 cruzeiros for special Masses and a hundred cruzeiros for each of from 9 to 12 members of the band. The cost of fireworks obviously varies with the amount of fireworks used but ordinarily is around 400 cruzeiros. In addition, gratuities are given for several services, including 10 to 20 cruzeiros to decorate each *andor*, from 30 to 40 cruzeiros for the singers at each *reza* or Mass and (sometimes) procession, 20 to 40 cruzeiros to wash and iron the linen in the church and 20 cruzeiros for cleaning up the building before and after the *feira*.²⁶⁸

A ritual which is a part of many *feiras* is that of the raising of the *mastro*. The latter is a long pole, sometimes painted in vivid colors, to the upper end of which is attached a *bandeira* (flag) to honor a given *santo* (pl. 16, a). At the last *feira* for São João, for example, a *mastro* 27 feet high was erected. To its upper portion had been attached a wooden frame about 15 inches square in which was a cloth "flag," with the image and name of São João stamped upon it. The *mastro* may be removed a month or so after the *feira* or it may be left until the next celebration for the *santo*, when the *mastro* is taken down and the "flag," now faded and torn by the action of the elements, is replaced. A *mestre de mastro* (master of the *mastro*) is appointed to oversee the ritual.

Occasionally, a *mastro* is erected near a house and kept there permanently. A farmer, for instance, who is named Antonio in honor of Santo

Antonio de Padua, raised a *mastro* in front of his farmhouse several years ago (pl. 17, e). Each year, on June 13, or the "day" of Santo Antonio, a new "flag" is exchanged for the old and, when the pole itself is in need of being replaced, a new *mastro* is set up. No *feira* is held at this time, although a few neighbors may come in to assist. A bonfire is built near the *mastro* and the family and guests take *café* and *quentão*.²⁶⁹ At this time, the children usually sing verses dedicated to Santo Antonio, and take turns leaping over the bonfire.

On the eve of a *feira*, an air of expectancy and suppressed excitement is to be noted in the community. A larger number of farmers is seen in the village than on other occasions and there are more persons at the evening *reza*. The next day, the village fills with farmers and their families and, if the *feira* be one of the more important *feiras*, with persons also from one or more neighboring towns, especially those who once lived in the community or whose relatives still reside there. When the band begins to play in the usually quiet *praça*, faces reflect a high degree of pleasure. Conversation groups form spontaneously here and there. Young men walk together up and down the *praça*, looking over the young women who are walking together in the opposite direction and who often blush at these glances. Everyone is dressed better than on other occasions; a few appear ill at ease in new suits or new dresses. Almost no one is barefoot.

The *feira* of *Semana Santa* lasts a week. It begins on Palm Sunday. Almost everyone to be seen in the village on that day, whether a man, a woman, or a child, is carrying a palm leaf, or a portion of a palm leaf, to be raised during the morning Mass, when mention is made of the way having been strewn with palm branches as Jesus entered Jerusalem. After being blessed by the *padre*, the palm leaves will be taken home and kept throughout the year. Following the morning Mass, many farm families remain in the village. At an advantageous point, an occasional stall has been set up for the purpose of selling food and drink to those who have come a long distance and who may become thirsty or hungry before their return home.

By early afternoon, the streets are nearly filled with villagers and country folk, ready to partici-

²⁶⁷ Currency is sometimes given in addition to a *prenda*, or in substitution of it.

²⁶⁸ When a *feira* is given at a chapel outside the village, those who cut the grass and weeds around the chapel are usually furnished bread, *café*, and *pinga* while at work.

²⁶⁹ See section on Pinga, Tobacco, and *Café*, p. 40.

pate in the procession known as the "Procession of the First Meeting." Two lines form in front of the church, one faced toward the *praça* and the other, at right angles, toward the Rua da Penha. One line is composed only of women and the other only of men. Four women are carrying an *andor* with the image of Mary and four men another *andor* with the image of *Senhor dos Passos* (Jesus Carrying the Cross). Each line begins to move, the men led by the *padre* and singing hymns that refer to the life of Jesus, the women singing hymns that refer to the life of Mary. The men pass through the *praça* and the women climb along the Rua da Penha until each group comes out at different points on a winding cross street, formed by the road that comes in from Boa Vista, where they turn toward each other and proceed along this street until they meet. The coming together symbolizes "the meeting of the glances of the Most Holy Mother and her Son," as Jesus was carrying the cross up Calvary.

On the occasion of the *feira* this year, the *padre* then spoke for a few minutes, saying, among other things:

Think of that mother exchanging a last glance with her son, he to whom she had given birth, he who was flesh of her flesh and blood of her blood, and not being allowed to take him into her arms! Jesus was on his way to his death. He was surrounded by soldiers and other persons who were mocking him, and his Most Holy Mother could not even come close enough to touch him. She could only exchange with him a glance! How great must have been the suffering of Our Lady! And all this, my brethren, because of our sins! Our sins which only the tears of the Most Holy Mother and the blood of Jesus can wash away! Let us all kneel down and ask forgiveness of the Virgin Mary and of Jesus Christ! Let us ask pardon for our sins!

Kneeling, the *padre* then made the sign of the cross, as did all the others present. A woman, about 50 years old, began to weep hysterically and turned and left the group, making her way to her home.

The men formed in line to either side of the women and the two images, side by side, were carried back to the church. No one was to be seen in the village who had not taken part in the procession; persons who for any reason could not participate, had remained in their homes. That evening, a large crowd attended the *reza* in the church.

No ceremonies are held either on Monday or Tuesday. The village becomes even more quiet

than usual. No one for any purpose will fire a gun during these days.²⁷⁰ No one plays a musical instrument or laughs loudly. If a person momentarily forgets and laughs out loud, he immediately will receive from the other persons present, glances of frank disapproval. If he were to continue to laugh, the others would turn their backs upon him. On the following day, the silence seems to increase. The village appears deserted. Rarely does anyone come to the stores. A few persons go to the church to pray quietly. Several men have gone to the river to fish, so that their families will have a substitute for meat.

From 8 o'clock on Thursday morning until the same hour on Friday, several groups, each composed of six persons, chosen by the *padre*, alternate each hour in "keeping watch" at the altar in the room of the village church where the image of Jesus in death is kept. The first 10 hours, or until 6 o'clock in the evening, the watch, or *guarda* as it is called, is kept by women; the last 14 hours, from 6 o'clock in the evening until 8 o'clock the following morning, the watch is kept by men.

A cross, made of white roses and other flowers and adorned with white lace, has been placed over the case in which the image lies. In front is a wooden railing and, beyond it, three plain benches, to accommodate the "watchers." Back of these is a small table, covered with a white cloth on which are two prayer books for the use of the *padre* when he enters the room periodically, during the time the "watch" is kept. The members of each group take turns kneeling in front of the railing, two persons at a time, for approximately 5 minutes, each holding a candle. The other four or five persons in the group either kneel in prayer at the benches or remain standing. That evening, the church is always filled with people praying, while a chorus, usually composed of two or three young women, sings funeral hymns.

On the evening of the following day, or Good Friday, the "Procession of the Burial" is held. "You should see the people who come in for this procession," remarked a villager. "All the farms around are emptied for it." This year, on the night in question, the sky was clear and the moon shone. The village streets filled with people to an extent seen at no other time during the year.

²⁷⁰ Neither does anyone "spill the blood" of an animal for food.

A truck brought several families from São José dos Patos. The church was packed with persons praying.

At 9 o'clock, the procession began to form. Two long lines of women stretched up the village street. After them, the band took up its position, followed by the *padre*, a girl representing Veronica, and the two assistants of the *padre*. The image of Jesus lying in death came next, carried by six men. Over it was a canopy, held up by several other men. Behind the image, a large number of men gathered.

Just as the procession was about to set out, the girl representing Veronica climbed up on a chair and sang a verse from a funeral hymn. As she sang, she unrolled a scroll on which was printed an image of the head of Jesus, and showed it to the assembled people. When she had ended the verse, a chorus of women's voices repeated it, while the girl again unrolled the scroll and showed the head of Jesus to the crowd. Then she stepped down from the chair, the band began to play a funeral march and the procession set out. It wound its way slowly through all the streets of the village before returning to the church. Seven times the marchers stopped, "to symbolize the seven times that Jesus fell with the cross as he went up Calvary and also the seven weeks of Lent of which Holy Week is the last." Each time the procession stopped, the girl representing Veronica sang. Between 1,000 and 1,100 persons were present. Attitudes of reverence and respect were reflected in every face, without exception. Whenever the girl sang, the silence was so great that she could be heard all over the village.

At the door of the church, the girl sang for the seventh time, after which the *padre* delivered a sermon in which he spoke of Jesus' burial. Once, during his remarks, he pointed directly at the image of Jesus in death and said, dramatically, "It was we who killed Him with our sins." After the sermon, the procession entered the church and a *reza* was held, while the people formed in line and filed past the image of Jesus in death.

At 8 o'clock the following morning, a "Mass of *Aleluia*" was celebrated and at 10 o'clock the church bells, which had not rung since Sunday broke their long silence in "joyous" peals. That afternoon, an accordion was heard in the *praça* and, a little later, a *chorinho* formed, consisting

of nine young men with an accordion, a *violão*, and several *cavaquinhos* and tamborines. The young men began to play in front of one of the stores. At 9 o'clock that night, a dance was held at a village home. A large number of persons was present and the dancing continued until long after midnight.

At 5 o'clock the following morning, which was that of Easter Sunday, the village was awakened by the ringing of the church bells to call worshippers to the *reza* which would precede the "Procession of the Second Meeting." It was not long before 200 persons had gathered at the church and more were arriving continually. At six o'clock, with the bells again ringing and the village band playing a lively march, the procession set out. The participants had taken up their positions as on the previous Sunday: the women in one line, facing toward the Rua da Penha; the men in another line, at right angles, facing toward the *praça*. At the head of the men was the *padre*. Four of the men were carrying an image of Jesus; four of the women, an image of Mary. As they set out, the men sang hymns referring to Jesus; the women hymns referring to Mary. The two lines followed the same route as previously, the men moving through the *praça* and the women up the Rua de Penha, and again meeting midway on their respective journeys around the village. The *padre* then spoke briefly regarding the meeting of Mary and Jesus after the Resurrection, the people listening with a show of great reverence and respect. After the *padre* had finished speaking, the column of men joined that of the women and the images were brought back, side by side, to the church. At 10 o'clock, a Mass was held, following which the church remained filled for a long time with persons praying.

The *feita* of Nossa Senhora da Piedade, given for the patron *santa* of the village, is held annually on, or near, September 28. It is preceded by a novena, consisting of nine *rezas*, held on consecutive evenings. This year, on the evening preceding the *feita*, rockets were set off and the village band, which had practiced every evening during the preceding week, played several marches. A dance, held at the home of a villager, added to the festivities. About a hundred persons were present and dancing continued until long past midnight.

Shortly after daybreak the following morning, the church bells began to ring. When they had ceased ringing, the band played a march in front of one of the village stores, after which the church bells were again rung for several minutes. The band then played three more marches, one at each of the three other principal points in the village, thus completing what is called the *alvorada*, or morning music. During the intervals when the band was moving from one point to the other, rockets were set off. Following the playing of the final march, several *morteiros*, or large firecrackers, were exploded.

By 10 o'clock the village had filled with farm families coming in on foot and horseback. At the corner of a village street, a man was selling cane juice. A village woman had made pastries for sale at the bakery. In the *praça*, a man from Boa Vista had set up a small stand where he was selling various trinkets and, later, held a raffle at which several small prizes were offered.

The regular 10 o'clock Mass was immediately preceded and succeeded by the ringing of the church bells, the setting off of rockets and the playing of the band. In the afternoon, an auction of *prendas* was held, with Bicáva again officiating.²⁷¹ Among the articles auctioned were an armadillo, chickens, eggs, sugarcane, pastries, fish, water glasses, bibelots, bottled drinks, and packs of cigarettes. Later, a procession formed, whose subsequent setting out was announced by the firing off of rockets, the ringing of the church bells, and the playing of the band. Behind the several *andores*, including that of *Nossa Senhora da Piedade* in a prominent position, the *padre*, walking under a red canopy, with a yellow fringe, held by six men, carried the Host. As the Host passed, nearly everyone who was not in the procession knelt. Behind the *padre* came the band, its music alternating with hymns sung by members of the procession. After the group had returned to the church, a *reza* was held. Four acolytes assisted the *padre*. Six men stood on the steps leading up to the main altar, each holding a staff about 5 feet long, on the end of which was a candle, enclosed in a square glass frame. At the moment when the Host was elevated, the six candles were lighted, rockets were set off outside and a clarinet from the band, sta-

tioned near the door, was played and a drum beaten.

The *feita de São Benedito* is held annually on, or near, April 27. This year, approximately 40 *festeiros* divided the responsibility of preparing and carrying it out. On the evening preceding the *feita*, a *mastro* was raised in honor of the *santo*. The village band played and, as the *mastro* was being raised into position, rockets were shot off. A *reza* was then held in the village church, after which the band again played.

The next morning, which was Sunday, a Mass, especially dedicated to São Benedito, was celebrated. It was "announced" by the customary ringing of the church bells, followed by the playing of the band and the firing off of rockets. The church was crowded to overflowing. Many persons stood in groups outside. Two trucks, loaded with visitors, arrived from São José dos Patos and another from Boa Vista. In the afternoon, an auction of *prendas* was held, "announced" by the firing off of one large and two small *baterias* of firecrackers. To the usual means of carrying on the auction, there was added a *tombola*, a game of chance in which women and girls sold, for half a cruzeiro each, pieces of paper on which numbers were marked, after which a crudely made roulette wheel was spun to determine who won the *prenda* in question. Following the auction, a procession formed and passed slowly through the streets of the village. Approximately 800 persons participated. Numerous banners and standards were carried, in addition to the *andor* with the image of São Benedito, supported by women and girls.

Almost the entire month of June is taken up with preparations for, and the actual carrying out of, the *festas* for three *santos populares* (popular saints), as they are called: Santo Antonio, *casa-menteiro* (matchmaker), São João Batista, *padro-eiro dos batizados* (patron saint of the baptized), and São Pedro, *porteiro do céu* (gatekeeper of heaven). So much is this so that when the month of June is mentioned, it is associated immediately in the minds of local residents with these three *santos*. Together with the month of May, which is dedicated to Mary, June is of special significance in the life of the community.

The *feita de Santo Antonio* is held each year on the evening preceding June 13; that of São

²⁷¹ See Division of Labor, p. 58.

João on the evening preceding June 24, and that of São Pedro on the evening preceding June 29. The preparations for the first of these *festas* begin almost with the first day of the month and hardly has it terminated when preparations are under way for the next. June is a period of lessened agricultural activity. Most of the harvest, especially of maize and beans, terminates in late May or early June. The time until the planting, in July and August, for the *seca* (dry season) is perhaps more free for the farmer than any other period of the year.

Although each of these three *festas* is dedicated to a *santo*, its character is more secular than religious. The *padre* is not present. A *reza* may be held on the eve of the *feira*, but this is the only direct connection with either church or chapel. Some family in the community sponsors the *feira* and offers its home for the event. In the case of the *feira* of São João, the family is the same every year; in each of the other two cases, it varies.

The *feira* of São João is sponsored by Nhá Benta, a widow who lives in the village. This year, wires were strung from either side of her house across the street to either side of a neighbor's house, and pennants, made of white, green, and yellow tissue paper, were hung from them. The ground immediately below was well swept. To one side of the house, wood was piled for "the bonfire of São João."

Following a *reza* in the church, village and farm families gathered at the house for the raising of a *mastro* with the "flag" of São João, an auction of *prendas* to help with expenses, and a dance "to pass the time" until the hour of the principal event, at 3:30 in the morning, when a procession would form to carry the *santo* to the creek "to bless the water." Meanwhile, the bonfire had been lighted. At each of two small tables, set up under the pennants waving in the breeze, *quentão* was being sold.

Shortly after the appointed hour of 3:30 in the morning, an *andor*, decorated with rose-colored crepe paper, was carried out of the house by four girls. On it rested the image of São João, about 8 inches high, which is kept in the *oratório* in the widow's house. Behind the *andor*, a number of girls and a few women, each carrying a lighted candle, formed two lines. The men and boys followed, in a group. The *padre* was not present.

Proceeding slowly, the group made its way to the creek that flows at the edge of the village. The formation was then broken up and a large number of persons went down to the edge of the water to see if their faces were reflected in it. Although the idea that if one fails to see his image in the water, he may expect death before the next *feira* of São João, a year later, is not as widely held as formerly, it is still common. Many of the participants, of both sexes and varying ages, washed their faces in the creek since, it is thought, one must not wash on this day *after* the ceremony, or evil will befall him. A few persons also washed their feet.²⁷² Meanwhile, an elderly man took the image from the *andor* and, going down to the creek, twice made the sign of the cross over the water with the hand which held the image.

After the image had been returned to the *andor*, the procession re-formed, each group of persons being in the same position as before, and set out slowly on the return to the widow's house. Two men, each with a *violão*, then appeared in front of the procession. The marchers stopped. The two men, facing the *andor*, sang an improvised verse to the accompaniment of their musical instruments, after which an elderly woman and a girl stepped in near them and the four danced forward to the *andor* and then backward to their original positions, while they sang a chorus to the accompaniment of the *violões*. The procession then went on a few feet before again halting while the procedure was repeated with a different verse. From time to time, three other men "replied" to the verses given out by the players, with other verses composed spontaneously. This alternate advance and pause, while the players and their companions sang and danced, continued until the procession had reached the house from which it had set out. The performance is referred to locally as "the *caruru* of São João."

The verses which were sung recounted events from the life of São João or referred to the virtues of the *santo* and promises made to him. Two of the verses, and the chorus, were:

Ao meu João Batista
Eu canto cum confiança
Se ele protege os home
Não se esqueça das criança

²⁷² It is also thought that anyone whose candle goes out during the procession "will have a short life."

(To my John the Baptist,
I sing with confidence;
If he protects the men,
May he not forget the children.)

Olerê, Olerê, São João
Olerê, Olerê, São João
Olerê, Olerê, São João
Ao meu São João Batista
Eu venho cantá de novo
Ele é santo protetô
Que proteja nosso povo.

(To my St. John the Baptist,
I come to sing again.
He is a protector-saint.
May he protect us.)

Olerê, Olerê, São João
Olerê, Olerê, São João
Olerê, Olerê, São João

After returning to the house, the procession, accompanied by the players and singers, passed three times around the *mastro*, while verses were sung, each alluding to the fact that the group was "passing around the *mastro* of São João," following which, the image was carried into the house, taken from the *andor* and returned to the household *oratório*. The players and singers then danced three times around the room while singing:

O meu querido São João
No rio fomo levá
Agora imo vortano
Ele vai direito pro artá.

(My beloved St. John
We took him to the creek;
And now we've brought him back
To be put on the altar.)

Olerê, Olerê, São João
Olerê, Olerê, São João
Olerê, Olerê, São João

A *cafézinho* was then served to those who had taken prominent parts in the activities. The *feita* terminated at about 5 o'clock in the morning. Between 350 and 400 persons had participated.

The *feita* of São José is held on, or near, March 19. This year, at the regular *reza* on the preceding (Saturday) night, rockets were set off to "announce" the *feita* to the countryside. During the sermon at the 10 o'clock Mass on the following morning, the *padre* extolled the life of São José. Among other things he said, "To enjoy the immense happiness of being the husband of the Virgin Mary, God chose a holy man, one who would be able to protect well his wife and

her Divine Child. The kings of the earth arrange the best possible educators for their children so that they may become the great men of the future. God, who is more privileged than the kings of the earth, chose São José to educate His son in earthly things. São José was a man of great worth. He is a *santo* for whom all of us should have great devotion. He especially is the protector of the dying. But we should also invoke his name at every other moment of our lives, for he is always near God in Heaven and has great power and influence there." In the afternoon, the *prendas*, including chickens, cups, saucers, drinking glasses, clay statuettes, *guaraná*, and a bottle of cheap perfume, were auctioned and a procession held. Between 500 and 600 persons were present at the *feita*.

The *feita* of Nossa Senhora da Conceição is held annually on December 8 at the chapel about 5 miles to the south of the village. This year, the village band, shortly after daybreak, took up a position in front of the chapel and played the *alvorada*. Soon a crowd began to gather to await the arrival of the image which, 2 weeks before, as a part of the ceremony "to ask rain,"²⁷³ had been carried in procession to the village. Meanwhile, a procession had formed in the village to bring the image back to the chapel. Shortly after the procession arrived and the image had been restored to its accustomed altar, the usual auction was held. From time to time, the band played a few minutes while the auctioneer rested. Pennants, made of white and yellow tissue paper, hung from wires stretched between the chapel and the booth in which the auction was being held. A village storekeeper and two other men each had set up a counter where he was selling *guaraná*, *pinga*, beer, *rapadura*, and pastries. About 400 persons were in the vicinity of the chapel. The day was extremely warm. The sun blazed in a clear sky.

When the auction had terminated, around mid-afternoon, a procession formed. Four young girls carried the *andor* with the image of Nossa Senhora da Conceição. They were preceded by two parallel lines of children in the midst of whom four men, wearing the red mantles and the red ribbons of their order, carried, on another *andor*, the image of Jesus, brought for the occasion in a truck from the village church. In front of the children

²⁷³ See Santos, p. 151.

was the village band. Immediately behind the image of Nossa Senhora da Conceição, came the *padre*, followed by two parallel lines of older girls and women. The other men walked behind, in a group. Descending the hill on which the chapel is located, the members of the procession took a road which passes partially around the hill and, after traversing some 600 yards, returned to the chapel from the other side. Meanwhile, rockets were set off and *baterias* of firecrackers were exploded by John-the-Letter-Carrier. After the image had again been returned to the altar, the *padre* spoke to the assembled people, exhorting them "to love Our Lady as much as, or more than, Jesus Christ, for she is His mother and He loved her dearly and His respect for her was very great." The crowd then dispersed, with the exception of three men who were unable to walk by reason of the *pinga* and beer which they had consumed and who lay in different parts of the grounds. Among the topics of conversation which were heard being discussed as the men left the chapel were the onion crop, the extreme heat, the way "some men drink too much" and the "fights that used to occur" at this *feira*, "for this neighborhood, which is now a peaceful one," remarked a farmer, "once was famous for its fighting."

The *feira* of Nossa Senhora da Aparecidinha is held on September 8 at the chapel near the river to the north of the village. This year, stalls were erected near the chapel, at which games of chance were played and *pinga*, *quentão*, *café*, cane juice and other drinks offered for sale, as well as food, including fish, pork, beans, rice, bread, pastries, oranges, and peanuts. After an auction of *prendas*, the image of Nossa Senhora da Aparecidinha was carried in procession. Approximately 500 persons were present.

On the preceding day, a *feira* in honor of São Benedito had been celebrated, at the same chapel. An auction and a procession were held and the village band played during the day. That night, a bonfire was lighted and a *samba* held in front of the church. The latter is a favorite folk dance occasionally seen in the community. Two drums of different sizes beat out the *samba* rhythm while the people present formed in a circle and danced forward and backward to the music. As they danced, sentences improvised by the leader, as well as by others, were sung.

Once a year, many local residents travel out of the community to the *feira* of São Bom Jesus de Pirapora,^{273a} which is famous all over the region (Vieira da Cunha, 1937). It is held on August 5, 6, and 7. This year, on the final day, approximately 20,000 people visited the small town sometime during the day, and probably 2,000 persons participated in the procession held that afternoon. About half of the persons present were blacks or dark mulattoes. The sexes were rather equally represented. Perhaps only 10 percent of those present were under 12 years of age. Many persons came on foot or horseback; others came by truck, automobile, or bus. At midday, 56 trucks, 265 automobiles, and 13 busses were parked in the town. License plates indicated that these vehicles had come from the towns of Parnaíba, São Roque, Barueri, Itú, Pinhal, Piracicaba, Botucatu, Campinas, Itapeverica da Serra, Guarulhos and the city of São Paulo. The church was filled throughout the day. Hundreds of persons pushed their way into the church to pray, to light a candle or to form in line to pass by the main altar and kiss the feet of the image of São Bom Jesus de Pirapora or the hem of the garment, and deposit an offering in the coffer nearby. A few persons left at the altar gifts of unlighted candles, some of which were as much as 4½ feet high. A few persons came into the church carrying a piece of ribbon, or cord, with which to take the measurement of some part of the image so that, upon returning home, the ribbon (or cord) might be placed about the affected part of the body of someone in the family as a means of applying sympathetic magic for healing purposes. To facilitate the taking of these measurements, pieces of wood, each with a cross piece marked "head," "chest," or "waist," had been provided.

Many persons subsequently visited the *Casa dos Milagres* (House of Miracles) across the street. The walls are covered with photographs of persons, or of parts of their bodies, which are thought to have been cured by the miraculous power of São Bom Jesus de Pirapora. In the center of the room are racks supporting approximately 400 crutches and canes, discarded by persons who had once used them. Several crosses, including an especially heavy one which a man, in fulfillment

^{273a} It is customary in the community under study to add "São" (Santo) to Bom Jesus.

of a vow,²⁷⁴ had carried or dragged some 200 miles from southern Minas Gerais, occupy one end of the room. Many persons also washed their arms and legs in the river that flows through the town; or held children briefly in its waters, either in fulfillment of a vow or as a protection against possible harm in the future. A few persons carried away pieces of stone from the riverside to use as talismans.

In the afternoon, a procession set out from the church. Five images were carried. The first was that of São Benedito and the second that of São Bom Jesus de Pirapora. A group of pilgrims carried a red banner, upon which had been embroidered an image of the *santo* being honored and the inscription, *Romeiros* ²⁷⁵ *do Bom Jesus de Pirapora*. Under a canopy walked three priests, one of whom carried the Host. A band accompanied the procession and played as the group moved through the streets of the town and eventually made its way back to the church. At the door each *andor* was turned so that the image, as it entered, faced the crowd outside. Subsequently, inside the church, a large number of persons pressed tightly around the *andor* on which had been carried the image of São Bom Jesus de Pirapora, so as to try to secure a piece of ribbon, flower, or other object from it. A *soldado* stood nearby and helped distribute portions of these objects.

About the door were many beggars asking alms. At the sides and back of the church, approximately 40 booths had been erected, at each of which drinks or food were sold, as well as images and lithographs of the various *santos*, candles, cloth, clothing, kitchen utensils, perfume, and similar items. Several men displayed, in small suitcases, other articles for sale. One of the men used sleight-of-hand performances and another had two large snakes wrapped around his body, to attract the attention of persons in the crowd. Numerous games of chance had also been set up. The dancing of the *samba*, once a picturesque part of this annual ceremony, has now disappeared, suppressed by the police at the request of the ecclesiastical authorities. A group of persons, some of whom were playing tamborines and a *cavaquinho*, singing popular songs, and dancing, in a *botequim*,

was broken up by police officers who confiscated the musical instruments.

Inhabitants of the community under study lament the changes that have come in this *feira*. "Some years ago," remarked a farmer, "there were no trucks or automobiles at the *feira* in Pirapora. Everyone went on horseback or on foot. They'd leave home a week or two before the *feira* was to begin. They'd take along enough food for the journey; or, if they were poor, they'd ask alms along the way. People like that made the *feira* worth while. The processions in those days were beautiful things. There also were *sambas* and everyone had a good time." Many local residents are coming to prefer the *feira* at São Roque. "About 7 or 8 years ago," said a villager, "the *feira* of São Roque began to get better. Now it's wonderful! All of us go. It's a beautiful thing! It's much better than the *feira* at Pirapora. That one has fallen off a lot. There got to be too many thieves and too many fights. Someone even got killed every once in a while."

By the "*feira* of São Roque" local residents refer to three consecutive celebrations held on August 15, 16, and 17 of each year. The first day is given over to honoring the Divino Espírito Santo and commemorating the assumption of Mary; the second, to honoring São Roque, the patron saint of the town. On the third day, a celebration is held in honor of São Cristovão. A week before the *feira*, or on August 7, a *reza* is held and, on the following day, a *desfile dos carros de lenha*, in which oxen and oxcarts, led by a band, parade through the principal streets, after which the animals are blessed.

This year, on the evening of August 15, a *mastro* was erected, to the accompaniment of a band and the firing off of rockets, in honor of the Divino Espírito Santo. It was about 25 feet high. It had been painted green and had a "flag" upon which the figure of a dove was stamped. At 6 o'clock on the following morning, a "salute" of 21 rockets was fired, after which a band paraded through the streets of the town. At 10 o'clock, a Mass was celebrated at the principal church. About 400 pilgrims from São Paulo attended, led by the *Irmandade de Nossa Senhora do Rosário dos Homens Pretos de São Paulo* (Brotherhood of Our Lady of the Rosary of the Blacks of São Paulo), founded in 1711. Following the Mass,

²⁷⁴ See Promessas, p. 173.

²⁷⁵ Pilgrims.

about 35 members of this brotherhood, each wearing a blue mantle, formed into two lines in front of the church and, behind them, approximately the same number of members of the Brotherhood of the Most Holy Sacrament of São Roque, each wearing a red mantle, also formed into two lines, next came three girls, each dressed in white and wearing white gloves, one of whom carried a banner on which was embroidered the image of a dove. Behind the three girls, were four other girls, supporting, in horizontal position, four white poles, each about 10 feet long, so as to form a square. Within the square was an "Emperor," with a scepter in his right hand, and an "Empress" carrying a large silver crown on a silver tray. Behind them came a band, in uniform, and the other worshipers.

The group marched to the home of the "Emperor," near the church, where the *rosas*,²⁷⁶ which were lying on a red cloth upon an improvised altar, were blessed by the priest and distributed by the "Empress" to all persons present. On the wall behind the altar was another red cloth, with the image of a white dove embroidered upon it.

In the afternoon, a procession began to form in the *praça* in front of the principal church. A group of persons came into the *praça* carrying *andores* with images from another church so that, by the time the procession set out, there were 23 images being carried. The *andores* had all been decorated with artificial flowers and paper streamers, the colors varying with the image. Each was carried only by women and girls or only by men and boys. The women and girls were dressed in the same color as that of the *andor* which they carried. All of them wore gloves. The men and boys, with few exceptions, were dressed in suits of navy blue. The "Emperor" and the "Empress" occupied a prominent position. After the procession, accompanied by a band, had passed through several streets of the town, it returned to the main church, where the images that had been brought from the other sanctuary were carried once around the *praça* and then taken back to the church in which they are usually kept. The other images remained in the *praça* while a priest, standing in the door of

the church and speaking into a microphone, preached a short sermon, after which they were returned to their altars. The members of the two brotherhoods then escorted the "Emperor" and "Empress" to the home of the new "Emperor" and "Empress," chosen for the next year's ceremony. That morning, following the Mass, the man and wife in question had been selected by lot. When the group reached the door of this home, they formed into two lines and the "Emperor" and "Empress" they were escorting passed between the lines into the house, where they handed their scepter and crown over to their successors. The remainder of the afternoon was given over to the secular portion of the *feira* (see below). In the evening, a fireworks display lasted approximately a half hour.

At 6 o'clock in the morning of the following day, another salute of 21 rockets was set off, and the band again paraded through the streets, playing lively airs. At 10 o'clock, a Mass was held and, an hour later, a *Bando Precatório*, composed of four girls, each holding a corner of a large sheet, began to go through the streets of the town, accompanied by the band. Persons in houses along the way threw coins into the sheet. A fifth girl, carrying a tray, received offerings from groups on the sidewalks. In the afternoon, an auction of *prendas*, and a procession in honor of São Roque, were held. After the procession had returned to the church, a *padre* preached a short sermon from the doorway.

On the following day, a Mass was held at 7 o'clock and, in the afternoon, a procession, both in honor of São Cristovão; the procession was accompanied by "all the trucks and automobiles in the *município* and surrounding area," as the local newspaper later reported, "since São Cristovão is the *santo* of the drivers of vehicles."

The secular portion of the *feira* included a *rodeo*; a traveling "carnival"; games of chance, played at stalls set up in the main *praça* and elsewhere in the town; secular music furnished by a band, stationed in the principal *praça*, the two local bands taking turns at playing; music from phonograph records, and an occasional group of songs sung by a local vocalist, amplified by loud speakers set up in the *praça*; and, in the evening, promenades around the square, on the part of young men and women. About 80 booths had

²⁷⁶ *Rosas* are small, round cakes, each about 6 inches in diameter, without centers. The ritual appears to be a survival of an ancient Portuguese custom to distribute food to the poor on the occasion of the more important *festas*, a custom which was subsequently restricted, it is said, by order of Dom Manoel, to the *feira* of the Divino.

been set up in and near the *praça*, at 28 of which games of chance were played. At the others, food and drinks were sold.

A *feita* for *São Gonçalo* is now rarely held in the local community. Elements of a popular character would seem still to adhere more to this *feita* than to any other. It is always held as the result of a vow,²⁷⁷ in which a promise has been made to hold a ceremony in honor of the *santo* in return for some favor requested. "Several years ago, Virgílio's wife had a bad sore on her leg," recalled a farm woman. "It was 'eating' up the whole leg. So she made a *promessa* to *São Gonçalo* to hold a dance for him if her leg got well. It did and so she arranged a dance for him at her house."

The *padre* is not present at a *feita* for *São Gonçalo*. The image of this *santo* is usually placed on a roughly constructed altar in the main room of the house. The altar may consist of a wooden box, on which a white cloth has been laid. Usually, there is an arch, made of bamboo or *taquara*, over it. Two men, each with a *violão*, take up a position in front of the image and begin to play and to dance, moving forward and backward, in front of the image, and stooping over to kiss the feet as they come near. A little later, as many as possible of the other persons present, with the exception of the small children, form behind the men, in two parallel lines. The players then sing a verse to the accompaniment of their instruments as they dance forward to the altar, bow to the image, and turn and dance to the rear of the lines. As they continue to play, two other persons, repeating the same verse, also dance forward to the altar, bow to the image, and turn and dance to the rear of the lines, after which a third couple repeats the same movement, while singing the same verse, and so on until the two players come again to the head of the lines. Another verse is then taken up and the dance continues as before. Each dancer is said to be careful to face the image as much as possible and to turn his back upon it only when a step in the dance requires him to do so.

Two other movements are also used, each of which is initiated by the players. The first of these consists in dancing while turning the body slowly in a circle, the meanwhile one maintains his place in line. The other movement consists in dancing for-

ward in unison, the persons in one line turning at the altar to the right, those in the other line to the left, and returning to the rear where they again advance to the altar and turn, this time, in the direction opposite to that taken before. Outside the room, looking on, is usually a large crowd.

The *feita* of the *Santa Cruz* is described below (see *Almas* and the *Santa Cruz*, below). Although no *feita* is held in the community for the *Divino Espírito Santo*, local inhabitants, as has been indicated, sometimes attend that held in connection with the *feita* of *São Roque* in the town of *São Roque*. Occasionally, one or more persons appear in the community who are traveling over the region collecting *esmolos* (offerings) for a *feita do Divino* in their community. Known as *bandeirantes*, because they carry with them a "flag" (*bandeira*), ornamented with ribbons and announcing the purpose of their travels, they are welcomed by local farmers and villagers and given *esmolos* and, as needed, food and shelter.

Connected with every *feita*, then, in which the *padre* has a part, is a Mass and, sometimes, also a *reza*; the ringing of the church bells at specified times preceding and during the *feita*; a procession, in which images are carried; and an auction of *prendas* to cover expenses. In connection with the procession, a sermon may be preached or brief comments made by the *padre*. Rockets and other fireworks are usually set off, a band plays, food and drink are made available for purchase, and games of chance are engaged in. At the more "popular" *festas*, a *mastro* is usually erected, the *samba* or other dances may be danced, verses sung to the accompaniment of one or more *violões*, and *quentão*, a favorite drink, made available. At all *festas*, the older inhabitants of the community meet and converse with friends and relatives, and the younger persons promenade and carry on the process of courtship.

The actual celebration of a given *feita* may be held a few days before, or after, the appointed date, especially if the latter does not coincide with Sunday, a day which is more convenient for the *padre* and also for most local residents. The date may also be altered by reason of adverse weather or other consideration.

ALMAS AND THE SANTA CRUZ

The inhabitants of the community participate mentally in two distinct worlds: the practical,

²⁷⁷ See *Promessas*, p. 173.

everyday world of human affairs; an unseen, mysterious world. Together with other beings, the latter is peopled with *almas* whose special time of moving about is at night. *Almas* are the souls of the dead which, under certain circumstances, it is believed, return to disturb, inconvenience, perhaps harm the living.

As he finished his supper, an elderly man in the village noticed that a water jar in the room was empty and called out to his wife, "Josefa, go fetch some water! The jar is empty." The woman took up the vessel and went out. "The jar must not be left empty," the man explained. "The *armas* ²⁷⁸ that come to visit the house during the night may be thirsty and it is well to leave water for them."

"João, our mail carrier," remarked an elderly woman in the village, "has to get up at 3 o'clock in the morning to go fetch the mail bags from São José dos Patos. One night he awakened startled, thinking he had overslept. He opened the window to look out and see if it was light yet. He saw a man walking along and said, 'Young man, what time is it?' The man came closer and closer and kept getting bigger and bigger. João asked him again what time it was. Then my mother, who lived just across the street and had heard João ask the time, called out, 'It's still early, João; it's only midnight.' As soon as she said 'midnight,' João knew that the man was an *arma*."

The appearance of an *alma* is said to occur any time after death. "When I was a small boy," recalls a village official, "my parents took me and my brother to visit my godparents in a town near here. One night, we were awakened by a noise above the ceiling, as if something was flying around up there. I said to my brother, 'Something's up there!' and covered up my head. 'There is something,' he said. 'I heard it too.' It kept on for some time. The next morning, early, I heard my godfather talking to my godmother about a noise he too had heard, there, above the ceiling. He was saying it must have been João Bispo who had died and had come to tell him about his death. But my godmother hadn't heard it. 'Nonsense!' she said, 'You only dreamed it!' 'No,' he insisted, 'I'm sure it was João Bispo. He came to me and said he wanted to thank me for all I'd done for

him. I'm going to write a letter to the village and see if João hasn't died.' My godfather wrote the letter and some days later came the reply. He called us and told us that João Bispo was dead. He had died at the very hour we had heard the noise there above the ceiling." "Felinho was disorderly," recalls a village official. "He was always causing trouble. After he died, the father-in-law of my father was at the window when a procession passed and he saw Felinho dancing and jumping about in the midst of the procession." "If someone dies and leaves money buried in a place no one knows about," said a farmer, "he will have no rest until it is found. He must come and get someone to dig it up. He can't have peace until he does."

One form the dead take is that of the *almas penadas*. They are thought to wander about, especially in solitary and lonely places, until they have completed punishment for sins committed or something left undone, like fulfilling a vow; or they may be the souls of persons who have died unbaptized and who wander about the world "because they can enter into neither heaven nor hell."

"One night," recalls a farm woman, "when my mother had just gone to bed, she saw a faint light moving in the room. She was afraid and didn't say anything. The next day she told a *comadre* about it and said she thought perhaps her mother wanted to talk to her. The *comadre* said, 'If she comes back again, send her to me. I'll talk to her.' And that was what my mother did. The next day her *comadre* came to tell her that her mother had made a vow to put 400 *reis* in the offering box for the *armas*, but hadn't fulfilled it. My mother paid the 400 *reis* and her mother never appeared again." "It's only the *armas* of the hunters that wander about here," said another farm woman who lives near the river. "Hunters, you know, never go to Mass on Sunday; they like to be out in the woods with their dogs and their guns. At night, you sometimes hear the rattle of their chains, the baying of their dogs, and the sound of the horn as they go by. Especially on 'the Friday of the Passion (Good Friday).'" "There used to be a man who lived near the river," said a farmer, "and took people across in his boat. At any hour of the day or night he would row you over. One night, someone called him. He got up and went down to

²⁷⁸ As indicated in the section on Language, (p. 115), the *l* sound is often changed to an *r* sound in the *caipira* dialect.

the river. As he came near, he heard the clanking of chains and dogs getting into the boat. He rowed them over. But when he had reached the other side, the *arma* said to him, 'Never more will you row people over this river because you have taken the *arma* of So and So in your boat.' And he never rowed again."

Another form the dead take is that of the *morto seco*, or "dried corpse." The conception seems to vary somewhat among local inhabitants, the *morto seco* being at times confused with the *alma penada*, and sometimes thought of as a separate phenomenon. A middle-aged woman in the village said:

When I was a little girl on the farm, about 7 years old, I first heard of a *morto seco*. He was a man who had died far from home. He was looking for someone with courage enough to carry him on his back and help him fulfill a vow he had made to São Bom Jesus de Pirapora and had never fulfilled; to carry him on his back at night until the cock should crow. After that he could rest. Then the *morto seco* would say, "Tomorrow night I'll come for you again." Imagine having a thing like that come for you!

A farm woman said:

The midwife who lives near here is a resolute person who thinks nothing of going out alone at night. The road she takes from her home passes by a wild, lonely place. One night, as she was walking along, she heard a voice say, "Can you get someone to carry me on his back to Pirapora? I will pay him. I have much money." She thought to herself "God have mercy! I know what that is." She replied that she would see if she could find someone. She looked hard into the brush and then she saw him. He was just bones tied together and the place where the mouth and nose should be, bees had filled with wild honey. And he kept swinging his bony hand in front of his face, the mosquitoes were so bad. Surely he will not be eternally lost. God will yet give him salvation. Some day he will find a person to take him to Pirapora. He must have made a vow to São Bom Jesus de Pirapora and never fulfilled it. One doesn't abuse a *santo* that way.

Revealing a somewhat different conception, a farmer said:

The *morto seco* is a man who has been cursed. Cursed by his father, his mother, his godfather or his godmother. An evil man. You know, they used to bury the dead under the floor of the church at the Freguezia Velha. Once, my great-grandfather dug up a grave there so they could put another body in its place and he found the man who had been buried for many years to be *seco*, just as he had been buried. He was a *morto seco*. The *morto seco* is so evil that not even the ground will receive him. God deliver me from such as that! What horrible things!

Another farmer said:

They are souls so bad—so terribly evil—that neither God nor the devil wants them. For certain, God has banished them. And they must be terribly evil if not even the devil will have them.

The cross is employed as an especially efficacious means of protection against possible harm from these and other mysterious beings. It is thought to possess magical power to keep all evil, "everything that comes from Satan," away from its vicinity. This conception is reflected in a phrase commonly used in the community (as elsewhere in Brazil), "*fugiu dele como o diabo da cruz*" (he ran from it like the devil from the cross).

If a person dies unshriven by the side of the road, a relative, a friend or other sympathetic person will erect a cross near the spot. Several crosses to be seen in the area surrounding the village were originally set up under these circumstances. Crosses are sometimes erected also at crossroads. "Where roads meet is a place of much evil," said a farm woman. "If a cross is not put up there, persons who use those roads may suffer harm." A family living at the end of a path or trail leading off from the road sometimes places a cross by the roadside at that point. This may be done in fulfillment of a vow (see p. 173). A cross is sometimes also set up near the entrance to a house, as "a means of protection against all harm," including the evil eye and the *saci*. A few feet from the door of a farm home, for instance, is a wooden cross about 3 feet high, decorated with artificial flowers and paper streamers. "It is good to protect our home," said the mother. "It keeps the evil eye away and also the *saci*. *Credo!* I'm afraid of that *saci*."

The cross is made of whatever wood is at hand but preferably of cedar. "The first cross," remarked a local carpenter, "was made by São José and he used cedar for it. That's why we like to use cedar too." It may be ornamented with one or more white cloths. Passersby often set lighted candles in front of it or leave flowers nearby.

Several wayside crosses in the community were erected so long ago that no one now living knows the precise circumstances under which they were set up. Reputedly the oldest cross is the Cruz Preta (Black Cross), of dark-colored wood, lo-

cated at the side of a road little used today. Said a farmer:

It is very old, very, very old! They say it was put up when that road was the principal one in these parts; when the *tropeiros* went along it to Santos to fetch stuff on the backs of their burros. I have asked many people if they remember when it was put up, but they always say that ever since they were alive and able to see what was around them, that cross was there.

When passing a wayside cross during the day, a man takes off his hat and a woman or a child makes the sign of the cross. Many persons avoid at all cost passing a wayside cross at night. "If you have to go by after sundown," said a farmer, "it's not good to take off your hat, nor even look. If you do, it will disturb the *arma* at his penance." An exception is made in the case of a *capelão* or other person who comes to pray for the soul of the person who has died at that spot. "This must be done at night," said a *capelão*, "because the *arma* is there only at that time and the *arma* must be present when you offer the prayers." Cases of *assombrações* are often linked, rather understandably, with these crosses, as also are legends like that of the "sow and her seven little pigs."^{278a}

As has been indicated,²⁷⁹ a small chapel may be erected over the cross. Occasionally this may be done at the time the cross is set up, in fulfillment of a vow made to the Santa Cruz (Holy Cross) as in the case of a small chapel at the side of the São José dos Patos road, located about a half mile from the village. A farm woman said:

It was Nhá Quina, the mother of my husband, who had it built there by the wayside. The family was in great need. Their house was falling apart. They had no money. So my husband's mother made a vow to the Santa Cruz. She promised to put up a cross and build a chapel over it if they could get on better in life, especially if they could have a new house. It didn't need to be a very fine house, she said; just one that was not falling apart. Things soon began to get better and one day they built the house where they live now. So she had that chapel built and a cross put up inside it.

A similar but larger chapel was erected some years ago at the edge of the village, near the creek (see map 2). It is located at the end of the "Street of the Pasture,"²⁸⁰ its open front facing up the

street, so that anyone entering the street from elsewhere in the village will see the chapel and its cross. The chapel is about 12 feet long, 9 feet wide, and 8 feet high. Its three walls are of brick, covered with *reboque*, calcimined in white. The floor is also of brick. The roof is of tile and there is no ceiling. In front are two low, narrow gates to keep out stray animals. Against the back wall is an altar on which is a large wooden cross. Along each of the side walls is a wooden bench.

One of the principal *festas* in the village, that of the Sagrada Santa Cruz (Sacred Holy Cross), is celebrated here. This year it was held on Saturday, May 24. Early that morning, the church bells were rung by John-the-Bell-Ringer to "announce" the *feira* to the countryside.

For the *feira*, the cross had been wrapped in white crepe paper, and white and red artificial flowers had been placed on the altar. On wires strung overhead from one side wall to the other, pennants, made of white tissue paper, had been hung. In front of the chapel, the street had been carefully swept. To either side, a rude shelter, called a *barraquinha*, had been erected, consisting of a roof of palm fronds, still green, supported on four poles, where *quentão*²⁸¹ and pastries were to be sold. Overhead, above the swept space between the two *barraquinhas*, other wires had been strung and pennants, made of colored tissue paper, hung from them. About 60 feet in front of the chapel, a deep round hole had been dug in which to set up the *mastro* in honor of the Santa Cruz. To one side, several feet away, sticks of wood had been piled, ready for a bonfire.

The principal *festeiro*, a villager famed for his skill in cooking, had prepared for the auction to be held in connection with the *feira*, several roasted chickens and a roast goat. About dark, he appeared at the chapel, dressed, in spite of a light rain which was falling and the chilly wind which blew from the south, in a white coat he wears only on special occasions. Hanging a lantern on a nail over the entrance to the chapel, he lighted several thick wicks and stuck each in a can of kerosene which he then placed about the swept area in front of the chapel, to provide light for the *feira* which traditionally lasts all night.

^{278a} Abortion is thought to be punished by the return, after death, of the woman in question, in the form of a sow, to wander disconsolate about the earth while her unborn children, in the form of pigs, "torment her." They appear in solitary places, especially at midnight.

²⁷⁹ See section on Churches and Chapels, p. 145.

²⁸⁰ The street is beginning also to be called the *Rua da Santa Cruz* (Street of the Holy Cross).

²⁸¹ See Pinga, Tobacco, and Café, p. 40.

Soon the space in front of the chapel began to fill with townspeople and farmers who were arriving singly and in groups. The proprietors of the *barraquinhas* had laid out their wares. By this time, the sky had cleared and the stars were shining.

About 8 o'clock, a huge bonfire was lighted, the heat of which was pleasant, since the night was chilly, and it was soon surrounded by a large crowd. Shortly thereafter, the *rezas* began. Two *capelães*²⁸² entered the chapel and, kneeling side by side, in front of the cross, began to lead the prayers. The chapel was soon filled with women and girls and the men and boys clustered about the entrance. Most of the women and girls and several of the men and boys repeated the prayers along with the *capelães*, the phrases "Santa Cruz," "Ave Maria," and "Jesus" being occasionally heard in the murmur of voices. A few men outside, however, continued drinking *quentão* and conversing with each other, an occasional loud laugh indicating the theme of conversation was not in keeping with the prayers being said inside.

The *reza* terminated about 9 o'clock. The auctioneer then took up a position in front of a small booth erected for this purpose and began to auction off the *prendas* to pay for the *feita*. About a half hour later, the auction was temporarily suspended while the *mastro* was set up. The principal *festeiro*, assisted by several men, picked up the heavy pole where it was resting behind the chapel and carried it to the appointed place. After attaching to the smaller end of the pole a square wooden frame containing a white "flag" on which a cross cut from dark paper had been pasted, the *mastro* was put into position for raising. While the other men held it ready to be set up, the principal *festeiro* went to get a couple of rockets.²⁸³ When he returned, he gave the order to raise the *mastro* and immediately lighted one of the rockets, which climbed into the air with a hissing noise, followed by a loud "boom," just as the men dropped the *mastro* into place. The space around the pole was then filled in and tamped down tightly, after which another rocket was set off, as someone shouted, "*Viva Santa Cruz!*" and other voices responded with a loud "*Viva!*"

The auctioneer then returned to his task. About midnight, with the auction still continuing, the *samba* began. Three men took a large drum, a smaller drum, and a *chocalho*²⁸⁴ and made their way to the swept space in front of the chapel, near the newly raised *mastro*, and began to play the *samba* rhythm, agitating the upper portion of their bodies in keeping with the music. Soon Zéca began to sing, in a strident voice:

À meia noite sai o dia
E bamo vê o Zé Maria
À meia noite sai o dia
E bamo vê o Zé Maria

(At midnight, [when] the day begins,
We'll see Zé Maria;
At midnight, [when] the day begins,
We'll see Zé Maria.)

The words were picked up by one spectator after another as he began to dance, until about 15 men were dancing. This verse was repeated, over and over, without alteration, for approximately an hour, when Zéca stopped playing momentarily before beginning another and similar verse. No women at any time participated in the dance.

The auction terminated shortly before 2 o'clock in the morning. The principal *festeiro* then cleared away the objects from the booth where the auction had been held and spread over the counter a black cloth with numbers from 1 to 6. Taking a die from his pocket, he placed it in a glass and began shaking the glass, as he called out, "*Bamo, rapaziada, óia o jogo da canequinha, cum duzentos reis ganha deistão*" (Come on, fellows! Here's a game of *canequinha*! For 200 *reis*, you can win 10 *tostões*²⁸⁵). A group of men began to cluster around. After six players had each laid a coin on one of the six numbers, the *festeiro* shook the die in the glass and spilled it out. The number on the die which had fallen upright was the winning number and the winner received five times the amount he had "bet."

By 2 o'clock, all the women and girls had left. Around 50 men still remained. The *samba* and the playing of *canequinha* continued until daybreak. Shortly thereafter, most of the village was asleep. The only persons to be seen in the streets were a few farmers who, following the *feita*, had

²⁸² See Sacred Functionaries, p. 146.

²⁸³ See Making of Fireworks, p. 83.

²⁸⁴ The *chocalho* is a metal tube, closed at both ends, into which small pebbles or hard seeds have been put.

²⁸⁵ See footnote 236.

not yet left the village for their homes. All were somewhat under the influence of the *quentão* partaken of during the night. In the principal *botequim*, the leader of the *samba* and several other men were lying on the floor asleep.

The "*dia das arma*" (all Souls Day), on November 2, is also an important day in the village. Early in the morning, families begin to gather in and about the church to participate in the 9 o'clock Mass for the "*armas*." Following the Mass, a procession forms, led by the *padre* and two acolytes, and goes slowly up the hill to the cemetery, as the *padre* repeats, in Latin, prayers for the dead, and those near him reply, from time to time, as he pauses, in the manner in which they have learned the words, "*Miserére, miserére nobis et misericórdia tuam.*" When the procession reaches the cemetery, all go directly to the small chapel inside, where the *padre* addresses the people. On the last occasion, he told his listeners that, after death, the souls of those who had died without sin would go to heaven, the souls of those who had died in "mortal sin" would go to hell, and the souls of those who had died in "venial sin" would go, temporarily, to purgatory. He emphasized that only the souls of those who had been "completely purified" could ever expect to enter heaven. He then requested all present to kneel and pray six times the Lord's Prayer and six times the Gloria Patri for the benefit of souls in purgatory. "If we pray as we should," he continued, "each soul will have 300 days of indulgence." He said that the prayers might be offered for the soul of any person, a relative or a friend. He exhorted those present to remember that one day they too would die and that their penance in purgatory could be shortened by the prayers of their relatives and friends. Reverently, with solemn faces, the persons present then prayed the 12 prayers. Upon the childrens' faces were unmistakable evidences of awe.

Following the prayers, the *padre* went from grave to grave *fazendo recomendações especiais* (making special "recommendations") for persons whose relatives or friends had requested special prayers.²⁸⁶ By 11 o'clock, the ceremony was over and the *padre* had left the cemetery. From then until late that night, however, family groups which had not been able to be present at the cere-

mony climbed the hill to the cemetery, carrying flowers and candles, and went to the graves of members of their family.²⁸⁷ The flowers were laid on the grave, and the candles stuck in the ground, and lighted. Each person knelt briefly in silence or bent the right knee while making the sign of the cross. The group then went into the cemetery chapel, where each person knelt and prayed a few minutes in silence, after which a candle was lighted for each deceased relative. Approximately 700 persons visited the cemetery during the day.

Until a few years ago, the ritual of the *sete passos* (seven steps) constituted a part of this ceremony. "I remember it well," said an older resident. "The people, in a sort of procession, went to the village church, the chapel at the end of the Street of the Pasture, the chapel in the cemetery, and to roadside chapels until they had 'completed (visited) seven crosses.' Everyone walked along quietly, as still as death. At each cross he prayed fervently. No one looked behind him because, if he did, he might see the *armas* which were accompanying the procession. Ê-ê-ê! How frightened I was of those *rezas* and the *armas*." The ritual was repeated each Wednesday and Friday night during Lent. Recalled a farmer:

On the seven Fridays and seven Wednesdays of Lent every year the men used to get together—the women could have come along too, there was nothing against it, but they never did—and went about making the *recomendações das arma*. They selected six crosses besides the one at the gate of the cemetery. They went out at night. They always carried a *matraca*.²⁸⁸ Ê-ê-ê! It was an awful thing! It would make everyone nervous. They went along praying the *recomendações das arma*. The prayers were to help the *armas* out—persons who had died at sea or who had died and no one knew about it or who'd had no Mass said for them, nothing. But it wasn't like ordinary praying; it was the Lord's Prayer and the Hail Mary, all right, but everyone drew out the words—Ou-r-r Fa-a-a-th-th-er-r-r—in such a way that their voices echoed all around. And banging that *matraca*, there at night! It was an awful thing! They went around to the

²⁸⁷ On the way to the village, some of the families had left a few flowers and perhaps a lighted candle, at each wayside cross they had passed.

²⁸⁸ The *matraca* is a board about 16 inches long by 10 inches wide, to one of whose sides two shorter pieces of wood are fastened with hinges so as to flap at will. The operator slips his fingers through a slit in the upper part of the instrument and, twisting his wrist back and forth, causes the hinged pieces to flap against the board with a sound like "pa-pa-pa-pa-pa." The *matraca* is used especially during Holy Week, on days when the church bells are not supposed to ring.

²⁸⁶ The fee is 2 cruzeiros for each prayer.

seven crosses, always ending up at the cross there by the cemetery, at midnight. As they went along, they couldn't look back or to either side, or even talk with one another; they could only pray and keep looking to the front.

PROMESSAS

At a time of personal crisis, especially on the occasion of a severe illness or accident, a *promessa*, or vow, is often made to a given *santo*. It consists in a promise, spoken in prayer, that if the afflicted person is brought safely through the crisis, a specified act will be performed in honor of that *santo*. The promise may be made either by the afflicted person or someone who acts for him. It may be the only means employed to deal with the crisis, or a further precaution in addition to seeking the aid of a "blesser," a *curandeiro* or a physician. "If you don't ask the *santos* to help you," said a farm woman, "going to a *curandeiro* or taking medicine may make you better, but very slowly. It is the *santos* who make the remedies work."

If, after making a vow, a person who is ill or has suffered an accident does not recover, the reason is thought to lie either in a lack of faith or in the fact that it is the "destiny" (*sina*) of the person to die at that time and consequently no intervention can be of avail. "To make a *promessa*," said a young woman, "a person must have faith in the *santos*. If you don't have faith, the vow will do no good." "If your hour has not yet come," a young woman remarked, "and you make a vow with faith, the *santos* will help you; but if it's time for you to die, the *promessa* can do no good."

If the individual obtains that for which he has asked, the subsequent fulfillment of the promise is considered absolutely imperative. Fulfilling the vow is referred to, rather realistically, as "paying" it. There is no specified time in which this must be done, but if the vow is not fulfilled within what is thought, under the circumstances, to be a "reasonable" period, the individual may expect to be subjected to chastisement (*castigo*) on the part of the *santo*. "If you don't 'pay' a vow," said a farmer, the *santo* will punish you. Besides, if you ask him again some other time, he'll not listen to you." If death intervenes before the vow is fulfilled, it is thought, as has been indicated, that punishment will fall upon the soul until, through the aid of some living person, it is able to discharge the obligation. "If a person fails to fulfill a *promessa*

before he dies," said a farm woman, "his soul will not go to heaven. It will have to return to earth and find someone to help it fulfill that vow."

In the community, as throughout the region, the principal *santo* to whom *promessas* are made is São Bom Jesus de Pirapora. Vows are known to have been made also to São Benedito, Santo Antonio, São Roque, São Gonçalo, São José, São Lázaro, Nossa Senhora da Aparecida, Nossa Senhora do Monte Serrat, the Divino Espírito Santo, and the Santa Cruz. In each instance, the vow was occasioned by illness, injury, pain, loss or other adversity. Involved were the following specific promises:

To make, upon recovery, a pilgrimage on foot to Pirapora.

To have a photograph made of the person who is ill or of the injured part of the body and to present the photograph to São Bom Jesus de Pirapora where it subsequently will be kept in the *Casa dos Milagres* (House of Miracles) near the church in Pirapora.

To have a wax image made of the injured part and presented to São Bom Jesus de Pirapora.

To let the hair of an afflicted child grow without cutting until the child reaches a certain age and then offer a photograph of the child to São Bom Jesus de Pirapora (in some cases, the hair, when cut, is presented to the *Casa dos Milagres* or thrown into the river at Pirapora).

To take the clothes which the person uses while ill and throw them in the river at Pirapora.

To carry a large rock on the head in the procession of São Bom Jesus Pirapora at the annual *feita* in his honor.

To give a dance in honor of the *santo* (only in the case of São Gonçalo).

To beg alms for the *santo* for 9 days.

To name a child in honor of the *santo*.

To have a child baptized at the altar of the *santo*.

To make a child a *festeiro*²⁸⁹ at a *feita* for the *santo*.

To beg alms to pay for a Mass.

To pray certain prayers.

To give money for prayers for souls in purgatory.

To set up a cross at the spot where a man has died unshriven.

To refrain from eating meat on Friday.²⁹⁰

The following accounts of *promessas* given by local inhabitants illustrate the behavior involved and the ideas, attitudes, and sentiments which guide and support it.

²⁸⁹ See Religious Festas, p. 157.

²⁹⁰ As previously indicated, a man from southern Minas Gerais some years ago carried on his shoulders or dragged along the ground a heavy wooden cross some 200 miles to Pirapora.

A young mother of two children:

My little girl is called Benedita because my mother-in-law made a *promessa* that if São Benedito would help me give birth to her, we would name her in honor of him. I had been in childbirth for a day and a night. My mother-in-law made the vow at 4 o'clock in the morning and by 8:30, Benedita was born. When my second child came, my husband was so afraid I might suffer like I did when Benedita was born, that he made a vow to São Bom Jesus de Pirapora to take the baby's picture to him if I did not suffer so.

A farm mother, aged 23:

I once made a vow to São Bom Jesus de Pirapora for my son. He had a sore on his foot that would not heal. He got burnt from his grandmother's pipe. She thought a lot of him. She couldn't see him without wanting to take him in her arms. But she could hardly walk; she had to remain seated nearly all the time. One day, when he was about 10 months old, he was crawling near her. She reached down to pick him up. The bowl of her pipe turned over and the burning tobacco fell on his foot. It wouldn't heal; he was always crawling around in the dirt. I went to Boa Vista to get some medicine for him and on the way I made a vow to São Bom Jesus de Pirapora that if he would let the medicine cure the sore I'd let the boy's hair grow and then I'd have a photograph made of him and take it to the *santo*. The remedy I got was a white salve. It was just like taking the sore out with your hand; in a few days, his foot was well. We let his hair grow until he was 2 years old and then we had a photograph made and took it to Pirapora to the *santo*.

A young farm woman:

Our family will have to give a dance for São Gonçalo. My mother made a vow that if my father got over being paralyzed, she would hold a dance for the *santo*. He got well. For a long time she intended to fulfill her promise. At first she didn't have enough sugar because of the War, and she couldn't hold a *feita* and not feed everyone well. Later, when the War was over and she had enough sugar, it was difficult to get bread.²⁹¹ Then my father died. And before she could fulfill the promise, my mother became ill herself and died. But the *promessa* is still valid and must be fulfilled.

A farmer, aged 50:

When I was sick, I made a *promessa* to São Bom Jesus de Pirapora that if I got well I would go from the village to Pirapora and back on foot. I must go into the village one of these days and start out to fulfill it.

A farm woman, aged 38:

I once had a sore on my leg, a very ugly sore. It was eating through the leg. I made a *promessa* to São Gonçalo that if he would heal it, I would hold a dance for him. I got well and a few weeks later we held a dance for São Gonçalo at our house.

A farm woman, aged 34:

My little boy once caught his forefinger and his little finger in the cogs of our *engenho*.²⁹² His hand swelled up badly. I rubbed hot castor oil onto it, and arnica and salt. I also gave him a little of the arnica to drink. I then made a vow to São Bom Jesus de Pirapora to take a wax hand to him if the hand of my little boy got well. It did. As you can see, the fingers are only a little crooked.

A young farm woman:

My little girl is sick. I have just made a vow to São Benedito that if she gets well, I will ask a *cruzeiro* of the first person who comes to visit us, tie it in a handkerchief around her neck and take it to the *santo*. When we get to the church, I'll untie the handkerchief and put the money at his feet. When my other little girl was sick some time ago, I made a *promessa* to São Roque to beg alms for a Mass in his honor. The other day I took her to the village and in a little while I had 13 *cruzeiros*. I gave 10 *cruzeiros* to the priest to say a Mass and I sent 3 *cruzeiros* to Senhor São Roque.

A villager:

Once when I was going to Pirapora there was a man in the bus with a child about 14 years old. It was dressed like a boy, with shirt, necktie, and pants. But it had two large braids tied up on top of its head. So I wasn't sure whether it was a boy or a girl. I kept quiet for a long time. Finally, my curiosity got the better of me and I asked the father if it was a boy or a girl. "It's a boy," he said. "He was born 'strangled' (with the umbilical cord tight about the neck). It was a half hour before we knew whether he would live or not. The midwife was frantic. Before she had time to see whether the child was a boy or a girl, she made a vow to the Divino Espírito Santo that if the child lived, its hair would not be cut until it was 15 years old."

A farm woman, aged 37:

When we left Minas to come here, I made a vow that if we got here safely, I would have a Mass said after we had been here a year. I also promised that if I didn't have enough money by that time to pay for a Mass, I'd beg *escolas* (alms) for the amount. When the year was up, we didn't have the money. So, at a *feita* in Paratinga, I begged enough money for a Mass. You must always "pay" a *promessa*, you know; if you don't, it'll be bad for you.

A farm woman, 60 years old:

Each time my daughter was about to have a child, I made a vow to Nossa Senhora do Monte Serrate (Serrat) that if she would give Nena a good hour when she had the child, I'd take it to her altar to have it baptized. Thank God! Nossa Senhora do Monte Serrate heard me. Both of Nena's babies were baptized at her altar.

²⁹¹ See Food and Food Habits, p. 37.

²⁹² See Tools and Other Equipment, p. 55.

A young mother:

My little girl once was very sick. She was so sick that her legs from the knees down were cold and so swollen that they looked like they would burst. She could keep nothing on her stomach. Then I made a vow to São Benedito that if he would make it worth while to give her medicine, I'd have her be a *festeira* at the *feita* for him and she would walk in the procession, wearing wings like an angel. Soon after we gave her the medicine, she turned to me and said she was hungry, and in two days she was eating like she always did.

A villager, aged 62:

Not long ago, I had a bad pain in my stomach. It got so bad I couldn't eat. Easter Sunday I made a vow not to eat meat on Friday²⁰³ for a whole year if I could get better. Now I'm much improved.

A farm woman, 43 years old:

When I lose something, I make a *promessa* to Santo Antonio and in a little while it appears. I make a vow to pray the *Responsório* and then I tell my husband about it, because it would be awful if I was to die without fulfilling the *promessa* and he did not know about it. Besides, he has to help me pray the *Responsório* because I don't know how to read.

A farm woman, 52 years old:

I have a vow to fulfill, but it is very difficult to do. Two of my children, a son and a daughter, were both sick at the same time. They had the grippe. I worked so hard to take care of them that I too became sick and then there were three of us in bed at the same time. My sister came over to help us. She made a vow that if we all got well, we would have a photograph made and I would take it to Pirapora. We all got well. But before we could get the photograph taken my daughter got sick again and died. Now I suppose the only way to fulfill the vow is to take a picture of myself and my son with another daughter.

A farmer, aged 48:

My mother made a *promessa* for me when I was about 13 or 14 years old. I didn't know anything about it. I was very sick at the time. She promised that I would go to Pirapora and "exchange" (buy) a *santo*, a São Bom Jesus de Pirapora—it need not be a very big *santo*—and then go from farm to farm here, asking for alms, and take the money and the *santo* and leave them in Pirapora. Although she made the *promessa* for me, I am the one who has to fulfill it. If I don't, she is not to blame. Nothing will happen to her. But I will be punished. If I don't fulfill it before I die, my *arma* will come back to trouble my relatives until the *promessa* is fulfilled. Just the other day my mother was saying to me, "You must fulfill that *promessa*." But for me, that's very difficult.

A few individuals never make *promessas* because they consider them too difficult to fulfill and the risk of not fulfilling them too great. They believe that faith, if sufficient, is an adequate substitute. "When I need something very much," said a mother of four children, "I just ask God with faith. I am not in the habit of making *promessas*. They are so difficult to 'pay.' And you must 'pay'; for if you don't the *santo* will chastise you. Ever afterward, if anything happens, you can't help thinking it's the *santo* punishing you." "I never make a *promessa* for any of my children," remarked another mother. "I ask God with faith and God helps. That which is most valuable is faith."

Vows occasionally are made for animals, as well as human beings. "Will you take a photograph of my dog?" asked a villager. "When he was sick, I made a *promessa* to São Bom Jesus de Pirapora that if he got well, I'd take a photograph of him to the *santo*. He's well and I must fulfill that promise."

ROMARIAS

Each year, a *romaria*, or group pilgrimage, is made by a number of local inhabitants to the famous shrine of São Bom Jesus de Pirapora (Vieira da Cunha, 1937), in a town some distance away. This pilgrimage appears to be a comparatively recent revival of an old custom which for some years had been abandoned. A villager recalls that "people here used to make this pilgrimage every year but, about 30 years ago, it got so that fewer and fewer people went and finally they stopped going altogether and there was no pilgrimage for a number of years."

For several months in 1939, however, the region in which the village is located was scourged by a severe drought. Several of the more devout inhabitants thought this might be due to the discontinuance of the yearly pilgrimage and a number of persons consequently made a *promessa* that if the much-needed rain fell, the pilgrimage would be resumed and made regularly every year thereafter. "It was a real miracle," recalls a local farmer. "Two days later, we got a good rain. And from that time to this, we have never failed to make the pilgrimage."

The *romaria* ordinarily is made in September. It is customarily made just previous to the *feita* of Nossa Senhora da Piedade, the patron *santa*

²⁰³ A special dispensation some years ago lifted the obligation of meatless Fridays in Catholic homes in Brazil, and in certain other countries, with the exception of the final Friday of Lent.

of the village, which is held annually on, or near, September 28. It was made this year on September 20; last year, on September 15.

On the appointed day this year, families from nearby farms came into the village to join the villagers who were making the pilgrimage so that they might go together. When all had arrived, they set out on the road. The older persons went by truck. The others were on foot or on horseback. There were about 60 people in the group, 35 of whom were women and girls. When the pilgrims finally came to the edge of the town of Pirapora, they paused to form into a procession, with the *padre* at the head, before proceeding on into the town and up to the church of São Bom Jesus de Pirapora. Entering the sanctuary, they filed in a single line past the image, pausing to kiss the feet or the hem of the cloak and to drop *esmolos* (alms) into the coffer nearby.

Approximately a third of the group, principally women and girls, then remained in the church for a *reza* and several were confessed by the attending priest. Most of the men and boys, however, left the church to walk about the town, to drink with their friends in the *botequins*, or to form groups of conversation on street corners and at the principal stores where they remained until late into the night.

The following morning, the group attended early Mass and several took communion. Most of the forenoon was spent in and about the church, in prayer or conversation. After lunch, the pilgrims again formed into procession and left as they had entered the previous day. On the outskirts of the town, the procession was disbanded and the pilgrims set out on their homeward way. Upon their arrival at the edge of the village, a procession was again formed, called the "*chegada da romaria*" (arrival of the band of pilgrims) and, led by the priest, the pilgrims proceeded into the church for brief prayers.

The following remarks of young men who participated in the pilgrimage reveal at least some of the attitudes of the local inhabitants who made the journey:

We didn't go to Pirapora to have a good time or even just to take a trip. The pilgrimage is a penance; it's a sacrifice we gladly make.

It's a real sacrifice to go that distance on foot. We went to ask Senhor Bom Jesus de Pirapora to help us

with our difficulties and also to thank him for the benefits we had received during the past year.

A pilgrimage is a devotion. It should be made with faith. Most people walk; and those who go in trucks, ride standing up so as to make the penance greater.

The most difficult part was to go on foot all that distance. But it wasn't so bad. As we came into Pirapora, we all sang together and repeated prayers.

If anybody goes on a pilgrimage just to have a good time, he should stay at home. A pilgrimage is a penance, not an entertainment.

In November of the present year (1948), a pilgrimage was made for the first time to the shrine of the patron saint of Brazil, Nossa Senhora da Aparecida, located in the town of Aparecida do Norte, approximately 180 miles away, near the border of the State. Thirty-two persons made the journey, 15 of whom were men. Travel was in one of the two busses owned by the men in the community who had recently organized the local bus line. The group was away from the village 3 days. "Many of us had made *promessas* to Nossa Senhora da Aparecida," remarked a villager. "We got to talking it over and we all agreed to go together at the same time."

EVANGELISTAS

During the period in which the community was under observation, a few members of a Protestant sect, the *Igreja de Deus* (Church of God), began coming each Sunday from São Paulo to hold a public ceremony in a room which they rented in a house in the village. For several Sundays, no local resident joined the two or three visitors from the city. Finally, however, a villager, whose curiosity had been aroused by the hymns he had heard being sung, "went in to see what it was all about." Three men, each around 30 years of age, were standing in front of a few empty benches and singing, without accompaniment. After the hymn, one of the men read, in Portuguese, a passage from the Bible, following which another man spoke for several minutes regarding the necessity of "walking in the straight and narrow way, the way of suffering and pain, that leads to salvation." "The broad highway of pleasure," he continued, "may give the body happiness but it destroys the soul." Subsequently, the three men knelt while one prayed for a considerable length of time, asking the blessing of God "upon the work (of establishing the new sect in the community)." The villager was impressed with the earnestness and

sincerity of the visitors and their apparently profound conviction that they possessed "great truths." Some weeks later, from 6 to 10 persons were coming regularly each Sunday. Among the group was the new *soldado* and his wife who had just arrived in the village and who previously had been members of the same sect.²⁹⁴

At approximately the same time, a few other persons began to meet in the home of the tinsmith who, together with his wife and mother, also had recently moved to the village. All had formerly been members of the *Igreja Cristã do Brasil* (Christian Church of Brazil). In addition to the tinsmith and his wife, the group included a farmer and his family and the young wife of the blacksmith. Each Sunday afternoon, a ceremony was held, consisting of the reading of passages from the Bible, prayer, the singing of hymns and an exhortation by one of the group. A few weeks later, about 20 to 25 persons, mostly farmers and their families, were attending regularly, the women each time being approximately twice as numerous as the men.²⁹⁵ In a farm home, located about 6 miles from the village, another small group of the same sect have been meeting for some time. Approximately an equal distance from the village, in another direction, is a small chapel built a few years ago by the Methodists, in which a religious ceremony is held each Sunday afternoon. The members of all these groups, irrespective of sect, are referred to by other local residents as *Evangelistas* or, literally, "evangelists."

Recently, a baptismal ceremony, sponsored by members of the *Igreja Cristã do Brasil* who live in nearby towns, was held at the edge of the village and this rather dramatic event became for days the principal topic of conversation in the community. On the appointed Sunday, two trucks, filled with people, came into the village from São José dos Patos, and five other trucks brought in visitors by way of the Boa Vista road. Soon a crowd of approximately 250 persons had gathered at the edge of the creek near the village, about a third of whom were curious spectators

from the local community. Several hymns were sung, after which the visitors knelt on the ground, which was wet from a heavy rain the night before, their eyes closed, while an elder prayed a lengthy and fervent prayer for "the salvation and purification of all men." Several persons wept, while others from time to time, with an appearance of deep emotion, called out, "Aleluia! Aleluia!" When the prayer terminated, the visitors rose to their feet and the elder took up a Bible and read a passage from St. Matthew and a few admonitions from the Epistles of St. Paul, after which he began to speak, earnestly, in a voice that became increasingly high-pitched as he went on, and with such rapidity that his breath came only in periodic gasps, between long streams of words:

St. John the Baptist always baptized with water, although he preached that some day there would come One who would baptize with fire. It was St. John who baptized Our Lord Jesus. If Jesus, who was without sin, was baptized, how much more reason is there for us, who are full of sin, to be baptized! A person who has committed a sin may not be in prison but he suffers just the same, by reason of his remorse. If he turns his thoughts to God and is baptized, though, his guilt will all be washed away. The water flows over him and cleanses him. It takes away his sin. The Kingdom of Heaven has been waiting there since the creation of the world. God says, "Come and take your place by my side!" Beloved, the voice of God is calling, "Come, I will receive you all!" God is a judge before whom it is useless to bear false witness. He is never misled. When you have been baptized, you are ready to appear before God. It brings grace to you. But a person should never be baptized until he has reached the age of understanding. Why should a baby of only 2 or 3 months be baptized? He has not sinned. A baby who is so small that he has to be carried to his baptism will remember nothing about it when he grows up. Baptism has no meaning for him; it was done without his willing it. But we do not carry people to baptism who know nothing about it. We baptize only persons who are old enough to have understanding and to ask for it themselves. When a child is baptized, they put a candle in his hand. Even if he isn't able to hold it, they put it there just the same. Sometimes the candle falls over and burns the child. Almost anything can happen! Beloved, that is not the kind of fire of which St. John the Baptist spoke! He who baptizes with fire is the Holy Ghost! Beloved, it is Our Lord Jesus who calls! Dear ones, our religion will make the whole world right! It takes out the anger that is within you. It takes out the desire for money. Money does not have much worth. It is of greater value to be right with God. One should go to school. But to what school? To the public school? No, my brethren! To the school of the congregation where the brethren come together. There, you will find God who will teach His people. Beloved,

²⁹⁴ Since this was written, the *soldado* has been transferred elsewhere in the State. The visitors from São Paulo can no longer be present each Sunday and meetings are held only sporadically.

²⁹⁵ Since this was written, a man has moved to the village to act as a layman leader of the sect. He is called the *encarregado* (the one who is in charge). He earns his living as a day laborer.

all you knew before is useless! It is the teaching of God which enlightens the people. My dear brethren, it is the hour of resolution! Listen to the call of Our Lord Jesus!

Now the brothers will change their clothing in the tent there and the sisters in the tent over here. Afterwards, we will all return and give thanks to the Lord. The water is waiting. Let us save ourselves today, for tomorrow it may be too late! Who knows if he will be alive tomorrow or not? Since the beginning of the world, God has prepared the way and the judgment of men. It is easy to recognize anyone who does not follow God's commandments, for he shows his condemnation in his face. In it are traces of sin and bitterness. But he who is right with God has peace of mind, and his assurance and tranquillity are written all over his face.

Throughout these remarks, the elder was heard with interest and respect. The visitors stood bare-headed in the hot midday sun. From time to time, a person, or several persons together, called out "Aleluia! Aleluia!" in such tones as clearly to indicate that the sentiments voiced by the speaker were identified in a profound way with his own. Subsequently, several adults were baptized by the elder, who was assisted by another member of the sect (pl. 17, *h*).

As has been indicated, the ceremony evoked widespread interest in the village and surrounding area. Most persons were merely curious. "I and my two sisters," said a young married woman on the following day, "all went to the baptizing. We didn't go because we wanted to become *Evangelistas*. Oh, no! We went because we'd heard that they take people down into the water and we wanted to see what it was like. I suppose we shouldn't have gone because those people don't come to *our* baptizings; instead, they make light of them." Some persons were amused and spoke jocularly of the event. "I liked it a lot," said a 16-year-old girl. "It was great fun to watch them put people under the water like that." "They tell me," remarked an elderly farmer, who had not been present at the ceremony, "that these people were taken into the creek and doused in the water. With this heat, that isn't such a bad thing." A few persons were sharply critical. "They say when you're baptized like that," a young man remarked, "you are born again. Do you suppose that fellow there (a man 55 years of age, who had just been baptized) has gone into his mother and come out again?" "I think this thing of putting you under the water so your sins will fall to the bottom," said another young man, "is a lot of fool-

ishness." "If I'd been one of those women being put under the water, with pants on and only to the knees" said a young woman, referring to the use of bloomers by the women being baptized, "I'd have died of shame." "You wouldn't get me to go into the water like that," said a girl, "I wouldn't risk getting mud all over me and maybe swallow a lot of water." Other persons, however, were impressed. "I liked the baptism," said a young woman, 18 years old. "There were so many people I could hardly see. And they were all so reverent and respectful. Those people really have faith."

Into a community where for many generations only Catholic ritual, ceremony, and belief had been known, the comparatively recent coming of these new and strange sects obviously has introduced a measure of conflict. Among local inhabitants, attitudes with reference to the *Evangelistas* vary from opposition to tolerance to a willingness to accept as one's own these new practices and beliefs.

Most persons are opposed. "These people," said a middle-aged villager, "are all insane." "None of them knows how to read," said a farmer. "They don't even know how to talk. And then they want to tell other people how they should behave. That's a funny kind of people." "Did you hear about that awful disaster in Minas?" asked a woman in the village, referring to a flood in a neighboring state, about which she had heard. "Many people died. A whole town was destroyed. That's the punishment of God. It's because of the *Evangelistas*. They abuse religion and God punishes for it." "Their religion may be all right," said a young farmer, "but so far as I am concerned it isn't worth a *tostão*."²⁹⁶

"Look!" said a young farm woman. "A mother gives you your life, doesn't she? It was she who had all the trouble of raising you. When you grow up, are you evil enough to say, 'That isn't my mother; she's just some old woman?' Everyone born into this world has a mother. Even the animals have mothers. Even trees. But they tell me these *Evangelistas* don't have a mother, nor a father, nor a brother, nor a sister. They say they must 'deny' their mother, their father, their brothers and their sisters' and cling only to God. Besides, they think the Most Holy Mary is not the Mother of Christ; that she's just a woman. And

²⁹⁶ A tenth part of a cruzeiro. See footnote 236.

for them there's no *santos*. They believe there's only God." "I'm glad I've always been a Catholic," said a farm woman. "I don't like these people who don't believe in the *santos*."

To alter one's allegiance to Catholic ritual and belief is rather generally condemned. "I was born in the Catholic religion," said a young man in the village, "and I shall die in the Catholic religion. Even if everyone else changes, I will not change." "All religions are good religions," said a rather tolerant farmer, "but *changing* your religion, that just must not be done." "Why should I change my religion?" remarked an elderly farm woman. "My father was a Catholic, my husband is a Catholic, and I was raised a Catholic. Why should I change?" A person who has wavered in his allegiance to Catholic ritual and belief and subsequently returned to it is especially ridiculed. "Simão turned *Evangelista*," a young woman remarked with evident disapproval, "and later he became a Catholic again. They say he became an *Evangelista* so he'd treat his wife better and stop drinking. But he got worse than ever, so he came back to the Catholic religion again."

Any permanent alteration in personal habits which may accompany the conversion of someone to *Evangelista* belief, is especially noted and commented upon. "It seems that these *Evangelistas* never smoke," remarked a villager. "Inacio came to buy tobacco from me for the man who is helping him hoe his maize. But he didn't get any for himself. He said he didn't smoke any more. What a strange fellow he's become." Some persons are much impressed by these changes. "Diogo," said a villager, referring to a young farmer, "began to listen to the *Evangelistas*, and now he's a changed man. He was spending too much time drinking; one day he came home half drunk. He was beginning to think too much about women. He always had a pack of cards in his pocket. But since he's been baptized, he doesn't drink any more, he doesn't gamble, and he doesn't run after women. It did him good to be baptized by the *Evangelistas*."

The belief held by members of one of the new sects to the effect that illness or injury can be cured "only by faith," is also extensively commented upon. "The other day," said a villager, "a woman came to the village with her children.

She had a little girl with an awful-looking place under her eye. She had been cut by a wire. But because they are *Evangelistas*, no one had done anything about it. It healed all right, but the eyelashes of the lower lid were all bunched together. It looked terrible. I asked the mother why something hadn't been done for the little girl and she said, 'We prayed and now it's well,' " "Some turn *Evangelistas*," remarked a young farmer, "because they believe the stupid idea that if you're ill and you change to that religion, you'll soon get well. What nonsense!" Other beliefs of members of this particular sect are considered strange and difficult to understand. "You know," said a farm woman, "an *Evangelista* said to me, 'You must not eat blood sausage or anything like that. It won't do at all. The Scriptures warn us against eating blood.' " "Their religion is funny," said a villager. "It doesn't let them break the neck of a chicken; they have to cut it with a knife and let the blood all run out before they'll eat it. They can't eat wild pig or anything that's killed with a gun, because they say the blood remains cooped up inside."

The rituals of one of the new sects also appear strange to many local residents. "This business of crying when they get together," said an elderly woman in the village, "is difficult to understand. They say they do that to imitate the disciples, that it says in the Gospels that once when they were on their knees, praying and crying together, there suddenly appeared on the head of each of them a great light. They say they cry together so they too will have light for their spirits. I don't understand it.' " *Quá!* that's all put on," said another woman who was present. "Crying that comes from the heart never has any set hour." "Yes," remarked a third woman, "and when one of them dies, they don't cry at all; they sing instead. They say the one who's died is entering into the Glory of God and they want to bring him to God with singing. I once saw a burial of an *Evangelista*. They sang as they carried the coffin; and when they put it in the ground, they also sang. What queer people!"

To these and other critical comments, many *Evangelistas* reply, as did a farm woman, "Let them talk. The light hasn't come to them yet. Some day the Lord will give them grace. We must be patient and wait. I, too, was once like that. When the light comes, they will be illumined."

Several persons in the community who have been identified with Catholic ritual and belief, however, find themselves becoming somewhat undecided; hesitant to forsake the beliefs and practices of their forefathers, but more and more drawn to the new cults. "Several of my neighbors who used to be Catholics," said a farm woman, "have become *Evangelistas*. They keep after me to let them hold their cult in my house. But I'm a Catholic and my parents were Catholics. Sometimes we go to their Sunday School, though, on Sundays. You don't have to become an *Evangelista* to do that. And, besides, they're really good people." Several other persons are not only tolerant of the *Evangelistas* but also quite well disposed toward them. "These *Evangelistas* are very serious people," said a village official. "They are all honest and hard working. That's a good religion they have." "These people never give you any trouble," remarked another village official, upon the occasion of the baptismal ceremony referred to above. "A thousand of them could get together, and there'd be no drinking or fighting; not even a quarrel." "They baptize you only after you're 12 years old," remarked a farm woman. "By that time, you know what it's all about. You can decide for yourself. That's much better." "I've seen that religion straighten up several *gente ruim* ('bad' people)," remarked a villager. "Take that man there who comes around sometimes on a striped horse to sell bananas. I used to know him when he wasn't good for anything. He'd strike his wife, he'd go around drinking *pinga* everywhere he could. He'd come to the *botequim* and spend the day there when he should have been working. Sometimes, when he started back up the hill past my house to go home he'd be so drunk that he'd let his horse run loose and he'd stagger around, shouting, way into the night. The dogs would bark at him. One night I took pity on him. I caught his horse and took off the saddle. Then I talked to him a bit and, when he had quieted down, I put a mat in the *terreiro*²⁹⁷ for him to lie on. Now he's gone into this new religion and he's straightened up. He doesn't beat his wife any more. He doesn't drink. He's a new man. A religion that does that to you, can't be

a bad religion." "These *Evangelistas* are *gente direita*,"²⁹⁸ said a farmer. "They are really serious-minded people." "The only defect they have," remarked a village official, expressing a proscription laid down in the local mores, "is that they get to thinking they're better than other people are."

The range of attitudes toward the new sects is further reflected in the following comments made by other persons in the community:

These people are always speaking against our *santos*. They say they are of clay. But we need not be bothered about that, because the *santos* will punish them.

Most people around here don't pay much attention to all this, but there are a few who have become *Evangelistas*. We had a neighbor who changed his religion. He kept coming over to my house and running down my religion, trying to convert me, too. When he talked that way I said I didn't like to discuss things I didn't understand; but he kept right on. I tried to be patient, but one day I turned to him and said, "Gaspar, if you want to come to my house, you may come; but if you can't get along without talking that foolishness, then don't come here any more. You won't get anywhere with that silly talk." After that, he didn't say anything more to me about religion.

The first time they came to the village, the *Evangelistas* aroused everybody's curiosity. That was several years ago. They arranged a room to preach their doctrine. The room was full of people. Some booed, but others liked what they had to say. But when one of the *Evangelistas* began to speak against the Catholics and the *padres*, the wife of Salvador got up and insulted both the man's religion and the man himself. The next Sunday there were not so many people, and after that they kept on dwindling away until there were none left. The first day, the preacher had been happy because so many had come. But when the number got smaller and smaller, he got more and more angry and finally he said that he, too, would put on a skirt so that all the people would come to hear him.

Anyone who is converted to this religion becomes a little queer. He goes around singing. Whenever he stops for a minute, he takes his Bible out of his pocket and begins to read. It's easy to tell an *Evangelista*. If you see a man taking along a Bible when he's going out to work, you may be sure he belongs to that crowd.

Some of those people even stop working just to read the Bible and sing. That will never do!

The only people who turn to that religion are drunkards and those who join it to rid themselves of some other vice.

Any ignoramus, no matter whether he knows anything or not, can be their preacher. They think he doesn't have to study; that the Holy Ghost will tell him what to say. That's a queer kind of people!

²⁹⁷ See Hygiene and Body Habits, p. 30.

²⁹⁸ Literally, "upright people."

Some of those people can scarcely even read. But they look at the Bible a little and then they go and try to explain it like they were *padres* who had studied a lot.

A fellow I know turned *Evangelista* in order to change his habits and soon after that he hit his wife with a stick so hard she nearly died.

They say their religion is good because it does not expect them to drink, smoke, or gamble. But I've never seen *any* religion that expected those things.

The *Evangelistas* talk more about religion than anybody else. If you give them a chance, they'll drive you crazy. They say their religion is the best in the world because they have the power to see the Holy Ghost. As if they could see him!

The *Evangelistas* take so much pleasure in talking about their religion! They say the Catholics live in darkness but they themselves live in light because they are on the way to heaven. They say that everyone else will go to hell. When I meet an *Evangelista* I don't like to talk very long with him because they're always going on about their religion.

All *Evangelistas* were once Catholics. But they didn't go to Mass as they should. In fact, they really weren't anything. And so, with a little talk, they could be led anywhere.

I think one couldn't ask for a better religion than the Catholic, if you follow its teachings. It's like the *padre* says: if you do exactly what you are told to do, you will become a *santo*.

When a person belongs to one religion, he ought not to change. I'm a Catholic and why should I leave my religion to follow another, I may then want to leave that one.

The Catholic religion is the oldest there is. It was 1,500 years old when the *Evangelistas* began. The man who started the religion of the *Evangelistas* was a *padre* who didn't want to fulfill his obligations and went around talking against the Catholic Church.

It isn't necessary to talk against another man's religion. When one of those people says something to you, all you have to do is to pretend you didn't hear it and that's the end of it.

Occasionally, a group of people of one religion will get into a discussion with a group of people from another religion. But that doesn't get them anywhere. Each man should be allowed to think as he wishes.

They can follow their religion and I'll follow mine. They think their religion is good and I think mine is better.

These religions are each a different way of thinking. Some people profess one religion and think it is the only one; others follow another, and think it also is very good.

Religion is like politics. There are many parties. The largest party is the one that dominates. In religion that's the Catholic. It's also the oldest.

Although some religions are absurd, they are all alike in one thing: they never teach anyone to do anything bad.

It must not be a bad religion. They speak of God. The "brethren" are closely united. Not even a heavy rain will keep them from meeting together. Sometimes they arrive at church completely soaked. I went to hear the songs the other day. They were not bad.

The *Evangelistas* claim the Bible says that when the end of the world is about to come, the *Evangelistas* will go around preaching in the four corners of the world. That's what seems to be happening.

Each of the new cults is carried on with a simplicity and directness that is appreciated by the *caipira*. Much of the language used by the *padre* in the rituals of the church is not understood by the people, while all rituals of the new cults are not only conducted in the Brazilian language but, since the ritual is carried on largely by laymen, in the actual dialect which the *caipira* best understands. The emphasis laid upon participation in such rituals as reading the Bible and singing, develops in the individual a satisfying sense of personal worth and of belonging. The invocation of the Holy Ghost, made in the ceremonies of one of these sects, in a dramatic and impressive manner, readily develops in the more credulous a positive certainty of the actual presence of supernatural beings. The development of a measure of skepticism in the community with reference to the older sect (see Skepticism, p. 182) puts at least a few individuals in a more receptive frame of mind with reference to the new cult.²⁹⁹

"When I first came here about 6 years ago, remarked a villager, "there were only a few *Evangelistas* in the whole community. Perhaps three or four who live near the old chapel and three or four others who lived this side of there. But now there are several more." "These people are increasing in numbers," remarked another villager. "They hold their religious ceremonies themselves, they treat everyone well and they never talk about money. If a new person goes to their cult, and there's no place to sit, someone will get up and give him his chair. They don't charge you anything to be baptized, nor anything to be married. They are simple people and you can see they believe very much in what they are doing."

The various Protestant sects, however, are also in conflict with each other. "We follow the gospel," said a member of one sect. "All the others say they do but they don't. Christ was baptized

²⁹⁹ This is equally true whether the sect be religious or political.

as we baptize, in the river. Those who do it any other way are not following the commandments. Besides, they smoke, they drink, and they go to dances. None of us do any of those things. And the women pray without a veil on their heads." Of the members of the sect which most recently entered the community, a member of another sect remarked, "They do everything wrong. They don't follow the Scriptures. They sing and shout all night and won't let people sleep. The Scriptures don't tell you to do that."

SPIRITUALISM

No spiritualist ritual is carried on anywhere in the community. There is a Spiritualist center in the town of Boa Vista, however, and its activities sometimes influence the thought and other behavior of local inhabitants. Its leader is also a noted *curandeiro* whose advice in time of illness occasionally is sought by someone in the community.

The first contact with the cult usually results from efforts to deal with illness. A farm woman said:

I went to a Spiritualist session the other night because my little girl was sick and when I talked to the *curandeiro* in Boa Vista he told me to bring her to his meeting."

Said another farm woman:

We have gone to the Spiritualist cult in Boa Vista off and on for some time. That man there has helped lots of folks. Why, he has even taken people out of Juquerí!³⁰⁰ My son was "weak in his judgment." A spirit had entered into him. We had to shut him into a room and tie him up. Everyone said he would never get any better. He was so much trouble! And when he was tied up, he suffered so! But the spiritualist cured him! Cured him completely! My daughter is also "confused in her mind." We took her to the spiritualist a few weeks ago and he said she had an evil spirit roosting on her. Now she's much better. I take her there every Thursday night. He also gives "fluid water" to the sick; a bottle, with a piece of paper inside which has writing on it. He's a fine man! He always laughs and jokes with you. He doesn't make a charge for his services; just asks a person to give what he can. He used to be poor and now he's well off. All day long, people come there to see him. From as far away as São Paulo. A person must have patience. Some people give him up and go to a doctor; they spend all their money for nothing and finally they come back to him. I never used to go to a spiritualist. I was afraid to do it. I didn't believe in such things. But now I've had more experience.

Occasionally, a favorable attitude toward Spiritualist belief and practice is expressed by other local residents. "The Spiritualist chain is of great power," remarked a middle-aged farmer. "It links all this weak world together." More commonly however, persons are skeptical. "This nonsense," said an elderly woman, "has put more people in Juquerí than anything else." "What a terrible thing!" said a young man, 27 years old. "This getting mixed up with beings from the other world! The *padre* is right. Those beings are all devils; they are not spirits at all!" "Spiritualism," remarked another villager, "is a bunch of lies. I heard of a boy once who disappeared from home and his parents went to a Spiritualist and he said the boy was dead. The family was all upset. They didn't know whether to believe the man or not. So he had them come to a Spiritualist meeting and there a spirit spoke to them who said that he was their son. They were sure then that he had died and they arranged a Mass for his soul. But a few days later, the boy came home; nothing had happened to him. That stuff is all nonsense it's only lies!"

The most common tendency among local inhabitants, however, is to be tolerant toward this system of belief and practice. "I do not go to Spiritualist sessions," said a farm woman, "but neither do I scoff at (*abuso*) this belief."

SKEPTICISM

A limited amount of skepticism exists in the community with reference to the ideas, attitudes and behavior associated with Catholic ritual and belief, the *almas*, *assombrações*, and other phenomena of the invisible world, and folk practices regarding sickness and its cure. It would appear to be more extensive in the younger generation, especially among the young men; to be less extensive among persons in the middle-age groups and least extensive among the older inhabitants. It is more extensive among men than women, a fact probably due to the greater mobility of the men and consequent wider range of contacts.

This attitude is revealed in the absence of persons from Mass, *reza*, novena, confession, and the communion table. It is also revealed in failure to participate in the processions at *festas* and in the annual pilgrimage to the shrine of São Bom Jesus de Pirapora. The latter, as has been

³⁰⁰ State insane asylum.

indicated, was once abandoned and, although it was renewed a few years ago, appears at present again to be in process of disintegration. In comparison with the total population of the community, only a limited number of persons participated this past year. "There used to be over 400 pilgrims," remarked a villager. "That's a lot more than the 60 we had this time." A considerable portion, moreover, of those persons who made the pilgrimage absented themselves from the Mass celebrated upon that occasion in Pirapora, and a number of persons, especially among the men, did not confess or take communion.

This attitude is also reflected in such remarks as that of a villager, 54 years old, who said, "These *rezas* are not for men." "Religion is something that's more for women," remarked a young farmer. "A man has other things to do." "That's funny!" said a young man, 26 years old, as he listened outside the church to the singing at a *reza*. "Those he-men³⁰¹ in there with that slow, sad singing." "Everybody says he's a Catholic," remarked a farmer, "but just look around and see if you can find anyone who follows the teachings strictly."

Occasionally one observes an attempt to separate the religious behavior of the individual from cult activities. "My religion," remarked a villager, "is between me and God. The church has no part in it." "The religion I follow is that of my house," said another villager. "What does anyone gain by going to Mass and beating on his chest, unless he also lives a good life at home?"

At the time the ceremony was being held recently "to bring rain," a man who had come to the village a few years ago was heard to remark, in a hesitant tone of voice as if he were advancing a new idea of whose acceptance he was in doubt, "It's funny that in the dry season people never think of going to fetch the *santa* until the rainy season is about to begin. That's because of the men of the skirts (*padres*); they do that and ignorant people like us lap up such *patacoadas* (lies known to be lies) while those fellows suck up the nickels." Upon receiving some encouragement from a few other men present, he continued, "Do you think the powers that govern the world need people to come asking for things? If they make it dry, they know what they are doing; and if they

send rain, it's because they want to send it." "Who knows, though?" remarked a bystander, "Maybe they're busy up there and have forgotten us and it's a good thing if someone *dá uma cotucada* (prods them up a bit)," to which remark there was general laughter. After the *santa* had been carried in procession and the long-anticipated rain had fallen, the man who had recently come to the village remarked, "Yes, it rained all right. And now the *padres* are in luck. A 'miracle' like that brings in a lot of nickels."

During the procession in which the image of São João was carried to the creek (see Religious Festas, p. 162), three attitudes were evident among participants. Most persons were reverent and respectful; some persons appeared indifferent; while a few laughed and talked among themselves. Among those who gave evidence of reverence and respect, women and girls predominated; in the other two groups, men and boys predominated, the ages of those who were laughing and conversing being about 20 to 30 years. Ironical references were made by a few persons to the belief that one who does not see his face reflected in the water will die before the next *feira* of São João.

"A lot of people," said a villager, "are so ignorant that they believe in the *benzedô* [blesser]. Instead of calling a doctor when they're sick, they go get 'blessed,' instead." "Only backward people see *assombrações*," remarked a young man. "They notice something at night, and they're afraid; they don't go up close to see what it is and then they come away talking nonsense about meeting an *assombraçãô*." I've seen a lot of queer things at night there in the brush and I've gone up to them and found only a stump, or a spot of moonlight; nothing more. It's fear and backwardness that makes people see things like that."

It would be a mistake, however, to conclude that skepticism is either widespread in the community or intense in any given individual. In fact, in proportion to the total body of belief, skepticism is rare and the skeptic anormal.³⁰² Doubts that exist are never reflected in active hostility to either belief or practice.

³⁰² In this connection, one might suggest that the observer needs constantly to be on guard against taking at face value statements which appear to express skepticism but which are evoked by the presence of an outsider from the city whose point of view is assumed to differ from that common in the village community.

³⁰¹ The precise words used were "*cada bruto marmanjão*," a slang phrase.

The most characteristic attitude among those who have doubts is reflected in the words of a villager who said, "I do not believe in these things; but neither do I 'abuse' them." The implication is that, although doubt exists, one cannot be completely certain about such matters; therefore, "It is better to be safe than sorry." "Arfredo says he doesn't believe in these things," remarked a farm woman, referring to her husband, "but it is only his mouth that says it; in his heart he isn't sure."

POLITICAL BEHAVIOR

No small part of the thought of the older persons of the community, especially of the men, is given over to the anticipation, commendation, or criticism of political events. Wherever persons come together, politics is an unfailing topic of conversation. Although the intensity of this interest varies from time to time, it never reaches low ebb and periodically, especially preceding, during, and immediately following an election, it builds up to a point where the tensions involved may become so great that violence sometimes results from comparatively small incidents. "They get so excited over politics," said a young man, "that they forget to take both dinner and supper. They keep thinking their stomachs are full."

Local political activity consists in carrying on political relations with officials and candidates for office in the seat of the *município*; discussing personalities and, to the extent that they are identified with personalities, the issues; orienting voters; and getting out the vote on election day. These activities tend to be effective insofar as they are carried on in personal terms. Although the names, or more commonly the initials, of political parties are employed in conversation, the parties are almost entirely visualized as being *of* such and such a man, or group of men, rather than as representing specific issues or programs of action. At the time of election, intimate contacts and personal relations play decided roles in obtaining political support, a fact clearly reflected in the remark of a village leader when he said, "I have the key which controls the community. I have 53 *compadres*. Besides, there are my relatives, my children, my sons-in-law, my daughters-in-law, my nephews and nieces. Here in these parts, the Buenos and the Cardosos (the names of his own and his wife's families) *é mato* (are legion).

That's why no one here can win from me. Every election it's the same; if I go one way, you can bet they'll go with me and that we'll win."

Intimate contacts are equally essential when local officials seek to deal with officials in the seat of the *município*. On an impersonal or formal basis, little can be accomplished. "The government in Boa Vista is Zico Moraes," a farmer remarked, referring to an official whose office is located in the seat of the *município*. "Things here in the village are handled by Fernando (naming a local official); you come to an agreement with him and he comes to an agreement with Zico."

Favors done by a political leader for persons in the community, which have accumulated during the interval between elections, are usually paid off on election day. If, at this time, a person does not vote in keeping with the suggestions of his political leader, he need not expect favors in the future. Especially to illiterate, or almost illiterate, persons, these "connections" with someone who holds political power may be highly important, in the event they are forced to deal with governmental functionaries. "Suppose you have a field near a boundary line," said a farmer, "and the ants from your neighbor eat up your crop. If you ask your neighbor to get rid of the ants and he doesn't want to pay the expense, you take the matter to Fernando. But if he's against you (that is, if he is of another party), you won't get any satisfaction whatever. Then, where are you?"

Political differences among local inhabitants are the principal forces which undermine solidarity in the community. On none of the numerous occasions in which groups formed for hunting, for instance, during the period of the time the community was under observation, did partisans of both of the two principal political parties go along together. Political differences were much more important in this respect than, for instance, race or color differences. In these hunts, Negroes, whites, *mamelucos*, mulattoes, and *cafusos* participated together indiscriminately.

Bitterness engendered by political differences may endure for years. Of conflict between two persons in the community, a villager said, "This comes from the politics of long ago. It comes from envy that keeps accumulating. We would get along well here in the village, if it wasn't for politics."

At least so far as political activity outside the community is concerned, graft is locally considered to be inseparable from it. "When they handle so much money," explained a young farmer, "they certainly would take out enough for themselves. That's why they scrap so hard to get into office." "A man goes into the government thin and hungry," remarked a villager, "and he comes out fat. It's like an *invernada* (a pasture to fatten cattle). The politicians get in to fatten themselves up." A local official remarked of a villager:

Antonio went to Boa Vista to get a license to drive a truck. They told him it would cost 700 cruzeiros, besides the regular fee and the revenue stamps. That's nothing but graft. But if you don't pay, they will flunk you when you take your driver's examination, and you'll never get a license. So I went over to Boa Vista. You know our party won the last election here but we lost it in the *município* as a whole. You have to be careful. If those fellows in Boa Vista turn against you, you don't get a thing and then you lose out here, too. So I went to see a man I know there. He told them to let me have it for 300 cruzeiros. Politics are mighty dirty; they are *really* dirty. If those fellows still make my man pay that much, what won't they do to others?

A vocabulary has emerged to refer to certain behavior ordinarily considered to be attached to political activities, especially those outside the local community. Among these terms and phrases are *bajular* (to flatter someone in order to obtain a favor from him); and *fazer cambalacho* and *fazer tramoia política*, both of which mean "to play dirty politics." Such behavior runs counter to the local mores, which lay a definite premium upon sincerity and honesty.

The executive branch of the State government is headed by a governor who appoints secretaries to assist him in discharging matters related to finance, public security, justice, roads and railways, agriculture, education, public health, industry, commerce, labor, and public works. The legislative branch is at present composed of 64 *deputados*, each of whom is elected from the State at large to represent 100,000 inhabitants.

The State of São Paulo is divided into 369 *municípios*, each of which is somewhat comparable to a county in the United States, although there are significant differences. A *município* consists of a town of varying size, together with the immediately surrounding territory. The town, regardless of the number of its inhabitants, is called

a *cidade* (literally, *city*) and has no corporate existence apart from the *município*. The latter invariably bears its name. The executive officer of the *município* is called a *prefeito*. A *camara de vereadores*, composed of 13 members in the *município* of which the community under study is a part, acts as a local legislative body, over whose acts, however, the *prefeito* exercises veto power. The number of *vereadores* depends upon the population of the *município*, one being elected for each 2,000 inhabitants, with an extra member should the total be an even number. The *município* in which the community under study is located covers about 300 square miles and its *sede* (seat) is a town of about 5,000 inhabitants.

The *município* is divided into *distritos de paz*, each centering about a smaller population nucleus which is always called a *vila*, even though it may range in size from a small hamlet to a large town. The *distrito* differs considerably from the township to which it sometimes is compared, the principal variation being that its existence is due to the presence of a population nucleus in the *município* other than the larger town which is the seat of the *município*. It also varies in the fact that the area immediately surrounding the *vila* is considered to be related, for political purposes, directly to it, and only indirectly to the *município*, a relation which is symbolized by the further fact that every *distrito* bears the name of the *vila* which is its center.

Cruz das Almas is the seat of a *distrito*, of which there are four in the local *município*. A *sub-prefeito*, named by and directly responsible to the *prefeito*, acts as the principal executive officer. During the period of time the village was under observation, however, this office was vacant and the local *fiscal*, whose usual obligation is that of collecting fees payable to the local government, acted instead.

The governor, a vice governor, the *deputados*, the *prefeitos* and the *vereadores* are all elected for a term of 4 years.

The State is divided into 139 *comarcas*, or judicial districts, which may or may not correspond, in a given case, to a *município*. In each *distrito* is a *juiz de paz* whose responsibilities include settling small disputes such as those over the boundary lines of properties and presiding at civil wedding ceremonies.

The assessment and collection of local taxes are made by the State government. Although an official for this purpose resides in the village, he is directly responsible to *município* officials. The State also assigns to the *distrito*, of which the village under study is the seat, a *soldado* who lives in the village. The local schools are State-established and supported. The calling of young men for military training is a Federal function.

In general, little concern is paid locally to politics outside the *município*. In a real sense, the latter is still the fundamental unit of Brazilian Government, in spite of the increasing trend to centralization during the last two decades. For villagers and farmers of the local community, the State government appears remote and the Federal Government has little meaning. "The election for governor doesn't interest us very much," said a village official and local political leader. "Those people live in another world. It's the election of the *prefeito* and our own *vereador* that's *aqui em casa* (here at home). If our candidates for these two offices are elected, we have support and can get what we need for the village. If we all stick together, we'll come out on top. The fight there in Boa Vista is awfully close and we can turn the scales."

News of Communist activity in the cities has reached the village but there is no Communist activity in the community, nor has Communist ideology at present any local adepts.

In a recent election, the larger of the two contending parties in the community was led by the *sub-delegado* whose followers include almost all the residents of the village and a considerable portion of those in the surrounding area. The minority group was led by a former *sub-delegado* who, by reason of certain attitudes of superiority shown in the past toward other members of the community is not well liked. (See Conflict, p. 196.) The local campaign began approximately 4 months before election and was carried on intensely, without the aid of newspaper, radio, leaflet, or poster, until shortly before the day set for the election, when a few posters and leaflets were brought over from the seat of the *município* and copies of the newspaper published there were also distributed. The campaign proceeded largely by way of conversation whenever, either by accident or design, a local leader met a relative, *compadre*, or other ac-

quaintance. The degree of intimacy between the persons in question, their kinship or *compadrio* relation, the frequency and intensity of their contacts, together with the community of interest which they shared, were the more important considerations in determining the effectiveness of this campaign. Each leader sought to convey to every one whose vote he thought he might influence, his own idea as to whom he should vote for and why. The leader of the majority group, for instance, would say:

You must vote for Januário for *prefeito* and Flávio for *vereador*. Those are our candidates. I'm voting that way and so are all my brothers, my children, my sons-in-law, my daughters-in-law, and my nephews and nieces; and so is Inácio and Matias and Little Boots³⁰³ and Domingos and Zé and Simão and Rino and Chiquinho. We are all going to vote that way. Everyone here in the village is with us. And *meu* is with us too, I'm sure. I'm going to see all your people, your family, and your *compadres* and tell them how things are. And then on election day, we'll all stand together. If we are united and strong, we can get something done for this place.

Later, as the campaign proceeded, this leader remarked:

Tá tudo controlado (Everything is "under control"). The "keys" (men of local prestige) are all declaring themselves. My two brothers "control" all the people there in Rio Abaixo (a local neighborhood) as far as the *sítio* of Little Boots. This side of there, Inácio and João the Ox are the absolute "keys." On the other side of the village there's Zé Red and Nego and Biruta who "control" from Zé's place up to the river. On the side of São José dos Patos, there are the Monteiro and Barreto families. In the Black Cross area, the "keys" are also coming out on our side. And here in the village, I and Little Moustache "control" almost everything.

One Sunday, about 2 weeks before the day set for the election, the candidates for *prefeito* and *vereador* of one of the parties, together with several friends, came over to the village from the seat of the *município*. Two men from the group went into the principal *botequim* to "treat" all the local residents who were present. Other men began to distribute leaflets and posters. Two large banners were strung up in the *praça*. On one was printed, "Vote for Bento Amorim for *vereador*. He is your fellow villager and knows your needs"; and, on the other, "For *prefeito*, Lourenço Barros, the man who has no selfish interests."

³⁰³ A nickname.

Since, however, the candidates of this party had few partisans and few opponents in the village, the visit evoked little interest or comment. Of the candidate for *prefeito*, several villagers remarked, "He isn't a bad sort. He's better than Chato (naming the candidate of the principal opposition)." Of the candidate for *vereador*, however, one villager said, "That fellow has the nerve to say he's from here and knows our needs. He once was a *caipira* just like we are, but he went away to study and became so important he doesn't know anyone any more. When you meet him in Boa Vista, he passes you up." "That's right!" replied another villager, "he hasn't been here for 12 years; and, now, just about election time, he suddenly remembers he's our fellow villager. *Isso num pega* (literally, 'that doesn't catch hold'; i. e., it will not be effective)."

A few days later, two automobiles and a truck bearing the candidates for *prefeito* and *vereador* of the party supported by most of the local inhabitants, together with several friends, appeared in the village. Their coming had previously been announced by word of mouth. Flávio, the candidate for *vereador* had grown up in the village and, since moving to the seat of the *município*, had maintained cordial contact with local inhabitants. The members of the village band gathered around and played a march. Both candidates and another leader of the party climbed into the truck and each spoke in turn to the approximately 100 persons who had gathered around. The candidate for *prefeito* said, "I had never thought of being a candidate. But, one day, Flávio, who is your candidate for *vereador*, came to my house and said, 'We have selected you to be our candidate for *prefeito*. The people of the village are with us. You can count on all of us.' So I accepted, and now I've come to see if Flávio was right when he told me 'The people of the village are with us.'" The third leader of the party then spoke briefly. During his remarks, the statement "These men who are going to be the new *prefeito* and your *vereador*, are both of them men of the people, simple men like us," was repeated again and again. With a modesty and simplicity which were much appreciated, the candidate for *vereador* then thanked the local inhabitants for their attention and support. When he had finished, he was given a spontaneous *Viva!* and the members of the

village band played another march. All the members of the band were present except one who had become a partisan of the opposition party. For not being present, he was severely censured.

The following afternoon, a truck, covered with posters, brought a third candidate for *prefeito* and his friends into the village. As the truck was driven around the *praça*, a man repeated, over and over, through a loud-speaker, "Vote for Lino, the candidate of the people." As the driver pulled up in front of the church, about a dozen men and boys gathered around. Two men began to scratch themselves vigorously, "as if they were full of *chatos*," a bystander said. This behavior was motivated by the facts that most local inhabitants were opposed to the candidate and that his nickname was "Chato," a slang term used to refer both to a certain body parasite, thought especially to inhabit brothels, and someone who is considered a "bore." Several persons called out, "For *chatos*, get *detefon*, get *detefon*."³⁰⁴ The volume of the loud-speaker was turned up, but this action merely resulted in louder and more ironic shouts on the part of the two men and other townspeople. The truck then drove once more around the *praça* and left the village. On the faces of other persons who, attracted by the commotion, appeared at the windows and doors of their homes, were evidences of approval of the behavior of their fellow villagers. "What is Chato doing here?" was a common remark. "He knows we're against him."

Meanwhile, the leaders of the two opposing parties in the community had persistently continued conversations with local inhabitants, regarding the way they would like them to vote. As the day of the election approached, the tension in the village increased. During the final week, almost no other topic of conversation was discussed. On election eve, a truck was arranged by the partisans of each party to leave at daylight to bring in persons who otherwise, by reason of age or distance, would have difficulty in reaching the polls. Two head of cattle were slaughtered for the *churrascos*, or barbecues, which the two parties would give the next day.

By 5 o'clock the following morning, the streets of the village were already beginning to fill with people. In keeping with the law, the *botequins* and *vendas* remained closed. People milled about

³⁰⁴ A form of D. D. T., sold in Brazil.

or talked together in small groups, local leaders making a final appeal to acquaintances to show their friendship, "good sense" and "love of the village" by voting as suggested. Preparations for both barbecues were under way (pl. 19, *e*). A group of women, with small children in their arms, had already gathered at the village registry office, where the voting was to take place, so as to cast their votes early and "be free to get dinner," as one of them said.

Few people were present at the barbecue of the party unsupported by most of the local inhabitants. At the other barbecue, however, a large crowd had gathered by 8 o'clock in the morning and continued to mill about until 1 o'clock in the afternoon. Twelve *arrobas*, or about 380 pounds of meat were consumed. Since those who had come into the village from distant *sitios* would have to be away a considerable part of the day and there ordinarily is no provision for obtaining food in the village other than that available at the stores, all of which were closed on this day, a barbecue is a means of developing considerable good will for the party responsible. The conversation was almost entirely given over to discussing the merits of the respective candidates.

In the meantime, a village official had taken up a position in the principal road leading into the village. To each person, or group of persons, coming into the village, he remarked, "By chance, do you have a weapon with you? I'm here to warn you that the *soldado* is searching everyone that comes into the village and taking away his weapon. If you go in with one, you'll lose it." "Many people thanked me," the official remarked, later, to a friend, "and pretty soon I had a pile of knives and two *garruchas*. I also asked if they had their *cédulas*³⁰⁵ with them. If they had a *cédula* for some other candidate, I often got them to exchange it for one of ours." Similar activity was occurring on the other roads.

In the village, other workers for each party passed among groups of people, asking if they had their *cédulas* ready and, when a voter showed one of the opposite party, attempted to get him to exchange it. Expressions on the faces of the leaders of the majority party, as well as their other

gestures, reflected positive certainty in a local victory for their candidates.

Up until about 11 o'clock, most of the voters were women; from that time on, men predominated. Shortly before 6 o'clock, all had voted. Of a total of 316 eligible voters in the *distrito*, 239, or approximately three-fourths (75.6 percent) had exercised their suffrage. The distribution by sex was as follows:

	Eligible voters	Actual No.	voters Pct.
Men-----	223	159	71.3
Women-----	93	80	86.0
Total-----	316	239	75.6

The following account of the election, given by a young farmer, reveals the ideas, attitudes, and behavior associated with this experience, especially on the part of the younger men.

When I went to the village on Saturday, everyone was talking politics. Another *soldado* had been sent to help the one in the village, in case there was any trouble. I wanted to go up in time the next morning to see the polls open; but they open so early and, since it was Sunday, I slept later than usual. It was 8 o'clock when I and my brother left home. On the way, we met Fernando (the village official mentioned above) and I let him have my knife. When we got to the village, a *soldado* was standing in the middle of the road. As we came up, he asked if I had a weapon with me and I said "No." I turned out of the way a little and walked around him and didn't stop to let him search me. I don't think the *soldado* liked it at all. I noticed, though, that many other people were doing the same thing. Only fools let themselves be searched.

In the village there was a lot of excitement. All the leaders were there, with big smiles on their faces, greeting everyone and asking them to vote for their candidates. I went to the voting place. It was packed. I then went to Mass. When I came out, a friend told me that there were two barbecues being held. I thought that was fine. There were so many people at the barbecue which our party gave, that there hardly was enough beef to go around. I had a piece, and it was very good.

The selling of liquor is prohibited, you know, on election day. That's pretty hard on those who are used to taking a drink or two now and then.

The morning passed without anything very exciting. But, about half past twelve, when I, one of my cousins and a friend were in front of the church talking, Paulo came up the street from his house. Just as he passed us, someone standing near the corner who doesn't like Paulo and his candidates any better than we do, yelled at him, "*¡Vejam o churrasco de boi bernento! Ô churrasco chato!*" (Did you see the barbecue with beef that's full of berne!³⁰⁶)

³⁰⁵ Voting is accomplished by putting in the ballot box a piece of paper, called a *cédula*, on which the name of the candidate (or candidates) voted for, has been printed.

³⁰⁶ See Wildlife, p. 21.

Oh, what a punk barbecue!)" Paulo stopped, and asked us who had said that. We told him we didn't know; that we had been talking and hadn't been paying attention. Paulo then yelled at the man he thought had yelled at him and gave him a good tongue lashing. Even then he wasn't satisfied and went to find the *soldado* to tell the fellow to keep quiet. Later on, there was some confusion at the polls because there were two voters of our party with the same name and the opposition was going to deny one of them the right to vote. There also was a heated discussion between Luiz, who's for us, and Affonso who votes with the opposition. Luiz accused Affonso of hiding the *titulo*³⁰⁷ of one of his nieces who wanted to vote for the men of the other party. Luiz said that Affonso's party was always doing things like that and there would have to be a stop put to it. He said he and his friends were not fools to be taken in by such tricks. There was a lot of shouting around and waving of arms before they got it settled. If there had been a fight, it would have been *some* fight, because a lot of people were all excited. Finally, Affonso left, talking back over his shoulder. Luiz followed him, shouting at him loudly. As they went up the street, a friend of Luiz's called to him to turn back. He didn't want any trouble. If Luiz's friend hadn't done that, I think there would have been a fight. At one time, while this was going on, Luiz passed in front of me. I moved over to one side right away, for if any bullets were going to fly, I didn't want to stop one.

At 5:40, the polls closed and the urn was sealed and taken to Boa Vista. It was quite a day.

RACE RELATIONS

As has been indicated, persons from the three basic races have long shared the local habitat. The colonizing European, especially of Portuguese origin, first came into the area, which had previously been inhabited by indigenous Indians, probably some time in the late sixteenth century, and subsequently there were imported into the community many Indians from other regions. For a long time, whites, Indians, and Indian-white mixed-bloods lived here in intimate contact until eventually the Indian, as both a biological and a cultural entity, was completely, or almost completely, absorbed.

Some decades after the whites began to settle in the area, the first Africans were imported into the community. As early as 1780, according to a listing of the population, made in that year for the Governor General, there were in the local parish 335 Negro slaves. Of the 90 heads of free families listed on the rolls as at that time living in the community, 61 percent owned slaves. One

of the leading citizens owned 85, or slightly more than one-fourth of the total. Two captains of militia owned, respectively, 22 and 17 slaves, another officer of lesser rank owned 14 and a vicar owned 13. Another man owned 32 slaves and two women owned 20 and 16, respectively. Three families owned one slave each, nine families owned two slaves each, and four families owned three slaves each. The other heads of families each owned from one to nine slaves, the average being slightly less than four.

In the local community, as elsewhere in Brazil, the development of personal relations between the slave, on the one hand, and the master and his family, on the other, tended to undermine the formal relationship. The godfather, for instance, of an elderly man now living in the village, is remembered as "a father to his slaves." When the decree of 1888 set free all slaves not yet manumitted in Brazil, "not a single one left his *fazenda*; all stayed with him and continued to work as before." At his death, he left all his property, including land and livestock, to his slaves.

Local villagers remember a former slave who, after abolition, became a person of considerable prominence in the community. "He was esteemed by young and old," remarked a village leader. "He knew how to shoe horses, to make bricks, to cut hair and to play the *violão*." The chapel of the Santa Cruz in the village was built by this man and the first *feira* to be held there was organized by him.

In the present population, the white contribution is the most evident, the number of persons who not only are considered white but who also are predominantly white by anthropological criteria, being clearly in the majority. Many individuals, in skin color, hair texture, and the formation of lips and nose, give evidence of European origin alone; while the number of individuals who appear to be of relatively pure African descent is quite small and no person who was observed appeared to be of pure Indian origin.

At the same time, casual observation of the population affords indisputable evidence of the operation over a considerable period of time of the process of amalgamation, involving all of the three basic races. In the physical characteristics of many individuals who are predominantly white, there are observable slight, moderate, or even quite

³⁰⁷ Registration slip presented by each voter before voting.

obvious evidences of Indian or African origin. As is to be expected, given the rather extensive operation of the process of amalgamation which, however, has covered only a limited number of generations, there is a large variety of mixtures of Indian, African, and European characteristics. The determination, in the case of a given individual, of the precise contribution of each of the three racial stocks would be an exceedingly difficult procedure. In general, however, the Indian contribution has been considerably greater than the African.

Racial categories are not employed in the vital statistics of the community. As has been indicated, color categories are used instead, there being three principal distinctions: *branco* (white), *preto* (black), and *pardo* (intermediate).³⁰⁸ As is true in other parts of Brazil, these categories have limited meaning in terms of physical anthropology. They are sociological, rather than anthropological, categories; that is, they reflect what local residents consider the terms to mean and also the way whites in the community behave toward persons of color. If a given individual appears to the registrar to look more like a white than a black or a *pardo* he is listed as a white, even though to persons sensitized to racial distinctions, and especially to the trained specialist, physical traits of non-European origin are clearly observable.

These categories are sociological in the further fact that the listing of a given individual reflects the relation to him of the person who is making the listing. If the registrar is a particular friend of the person in question, or of his family, an obvious black in all likelihood will be listed as a *pardo* and an obvious *pardo* as a "white." This may also occur if, on the day in question, the person doing the listing happens to be in an especially friendly mood or otherwise to be more than usually well-disposed toward the person being listed. The tendency to "grade-up" individuals in the color scale, especially under conditions of primary contact, is marked.

In fact, this tendency has become so extensive in Brazil that it may be said to now constitute an expected pattern of behavior. To fail to refer to a black, especially in his presence, as if he were at least a *pardo*, and to a *pardo* as if he were a white, is considered "bad form." It indicates that the

individual is lacking in that personal characteristic so emphasized in the local mores, namely, "knowing how to treat others well."

Thus, according to the official records of births kept by the village registrar, no black was born in the *distrito* during the 17 years from 1931 to 1947, or that period for which data on the color of births, in comparatively recent years, are available. Casual observation, however, reveals that there are in the village and nearby area a number of children under 17 years of age who, to all appearances are of relatively unmixed African origin. At least 27 blacks in this age group were observed.

Little attention is paid in other respects to either racial or color variations. One rarely refers to a given person as other than João or Maria. If one has occasion to speak of his color, the three categories mentioned above usually are employed, although rarely in the presence of the person in question. Only in extreme anger is the fact of obvious physical difference referred to. A black person is never called a "Negro" (Pierson, 1942, p. 138) to his face except in a quarrel. Ordinarily he will not even be referred to as a *preto* (black). He will simply be called an *homem* (man). "A man may be a black," said a white villager, "but he is also a person."

At the same time, prestige definitely attaches to white color, a fact not difficult to understand in the light of Brazilian history. Shortly after the arrival of the Europeans, the whites became dominant ecologically, economically, politically, and culturally. The only way for an individual of Indian or African origin to compete effectively was to take over significant elements of the white's culture. Under these circumstances, white color easily became symbolic of superior status.

These statements will perhaps be more clear if we consider the participation of persons from the various ethnic groups in the social life of the community. Persons of color will be invited, just like anyone else, to the house of a white. They will eat at the white's table. They will participate with whites in religious, as well as secular, *festas*. They will in no way be discriminated against in friendship, in employment, in voting, or in treatment by local officials.

In the groups of conversation which form spontaneously at the *vendas* and elsewhere in the vil-

³⁰⁸ "Yellow" is also used to refer to an occasional Japanese.

lage are to be seen men representing the entire range of color variation in the community. All converse together on terms of intimacy. There is no segregation of any kind. Similarly, blacks, mulattoes, *cafusos*, and *mamelucos* regularly drink and joke together at the *botequins*, play cards with one another or otherwise share activities, without any restraint being laid upon their conduct by reason of color. Especially indicative of relations between persons from the different color groups is the *virada*, described in the section on Etiquette (p. 122) in which everyone present partakes of a "common cup" on equal terms.

Among the principal leaders of the hunting and fishing groups are a *cafuso*, four *mamelucos* and three whites. When inviting other men to join them, there would seem to be no attempt to take into consideration variations either of race or color. Two blacks usually are among the hunters and when exploits in connection with hunts are recounted, the names of these two men figure prominently. One or more of five other *mamelucos*, all of whom are able hunters, are often to be seen in these groups.

At 13 dances observed, no discrimination of any kind was noted. Seven of the dances were held at village homes in celebration of a birthday or other family event, five in other homes merely for entertainment, and one in the open air at a *feira*. Among the persons present were whites, blacks, mulattoes, *mamelucos*, and *cafusos*, all of whom were seated or standing together, indiscriminately. At one of these dances, for instance, there were present 16 young women, of whom 7 were whites, 3 were blacks, 1 was a dark *cafusa*, 3 were *mamelucas*, and 2 were obviously descended from all the three basic races. The dance began at 9 o'clock and continued until shortly after midnight, during which time none of the young women, including the three blacks and the dark *cafusa*, failed, upon every occasion, to be invited to dance, each being sought out by white, mixed-blood, or black partners. Meanwhile, the white girls danced with blacks and mixed bloods, without there being apparent the slightest indication, on either part, of strangeness, or opposition.

At present, a case of *namoro* (courtship) which is in process in the village involves a white boy and a mulatto girl. No word of reproach or disapproval of any kind on either racial or color

grounds has been heard with reference to this couple. The behavior of the members of the community toward the two young persons would appear to differ in no way from that toward the principals in other cases of courtship. It would seem to be considered the normal outcome of natural events.

The "racial" composition of worshipers at the 10 o'clock Mass on two Sundays in the village was probably that given in table 15. There was no segregation of any kind. The *padre* was white. Of the three acolytes, one was white, one was black, and one was a mulatto.

TABLE 15.—Probable "racial" distribution at Mass, Cruz das Almas community, two Sundays, 1948¹

"Race"	Masculine		Feminine		Total	Percent
	Jan. 25	Feb. 15	Jan. 25	Feb. 15		
White.....	19	19	34	23	95	54.9
Black.....	6	4	6	3	19	11.0
Mixed-blood.....	7	10	22	18	59	34.1
Total.....	32	33	62	44	173	100.0

¹ As indicated by inspection.

² Probable distribution: males: mulatto, 1; *mameluco*, 11; *cafuso* 5; females: mulatto, 2; *mameluca*, 25; *cafusa*, 15.

The *fiscal* is white, as also are the *sub-delegado* and the *juiz de paz*. The tax collector is a *mameluco*, as also is the local registrar of vital statistics and the village bell ringer. The mail carrier is a dark mulatto. One of the part-time barbers is black and the other, who also shoes horses, is white, as is the tinsmith. The gravedigger is white. The most widely respected storekeeper is a *cafuso*; another storekeeper, whose father is a *mameluco*, is considered white; the third storekeeper, as has been indicated, is a Japanese. The owners of the two *botequins* are both white.

The common attitude toward the Japanese storekeeper and his wife is accurately reflected in the remarks of a young man who said, "They also are Brazilians. It's like one of them said, 'I too am a Brazilian; it's only that the face doesn't help.' A Japanese married to a Brazilian will have beautiful children, though. And the children will all be pure Brazilians."

INTERMARRIAGE

If discrimination on the basis of color exists in the community, it is in the final and ultimate realm of personal relations; that is, with refer-

ence to marriage and incorporation into the family. The tendency has always been for whites to marry whites and for blacks to marry blacks.

At the same time, there has been a considerable number of intermarriages, involving, at times, even partners from the opposite ends of the color scale. The marriage of mixed-bloods—*mamelucos*, mulattoes, and *cafusos*—with whites has long been a common phenomenon.

The imprecision, from an anthropological point of view, of local color categories, together with the tendency of the several registrars involved to "grade-up" individuals in the color scale, obviously reduces the value of village marriage records in determining the actual extent of intermarriage. The error, however, may be in the direction of an understatement rather than an exaggeration. Since there is a considerable number of individuals in the community who are descended only from European stock, the tendency to list actual *pardos* in the white category undervalues the number of cases of intermarriage which actually occur among persons listed in that category. And, although it is true that, in some cases where the registrar has listed a *pardo* as marrying a white the "white" is in fact a mixed-blood, the number of these cases perhaps is less than the number of intermarriages "hidden" in the white category.

During the 17 years from 1931 to 1947, inclusive, or that period during which color was taken account of in the marriage records of the community, there were 315 marriages. Of the total, approximately two-thirds were listed as marriages of *brancos* with *brancas*; that is, of white men with white women, as these terms are employed locally. In approximately a sixth of the marriages, a *pardo* was listed as marrying a *branca*; that is, a medium-dark or dark mixed-blood man was listed as marrying a white woman. In slightly less than one-tenth of the marriages, a *branco* was listed as marrying a *parda*; that is, a white man was listed as marrying a medium-dark or dark mixed-blood. There were no marriages recorded in which either a *branco* married a *preta* or a *preto* married a *branca*; that is, in which a white man married a black woman or a black man married a white woman. This fact, however, is probably due more to the tendency of the local registrar to "grade-up" individuals in the color scale, under conditions of primary contact, than to the complete absence

of such marriages in the community. These data are given in table 16.

TABLE 16.—*Marriages, by local designation of color, Cruz das Almas Community, 1931-47*¹

Color		Number	Percent
Husband	Wife		
<i>Branco</i>	<i>Branca</i>	191	60.7
Do.....	<i>Parda</i>	30	9.5
Do.....	<i>Preta</i>
<i>Pardo</i>	<i>Branca</i>	53	16.8
Do.....	<i>Parda</i>	30	9.5
Do.....	<i>Preta</i>	1	.3
<i>Preto</i>	<i>Branca</i>
Do.....	<i>Parda</i>	3	1.0
Do.....	<i>Preta</i>	6	1.9
Other ²	Other ²	1	.3
Total.....	315	100.0

¹ Source: Official records in village *Cartório*. Marriages in 1939 (21 cases) are omitted because in that year spouses were not specified by color.

² Japanese.

In the village and on nearby farms there are seven married couples, of which one of the spouses is white and the other of relatively pure Negro or Negro-Indian origin. In every case except one, the white partner is a man. The respective colors and ages are as follows:

- Man white, 65; woman black, with kinky hair, 48.
- Man white, 45; woman black, with kinky hair, 37.
- Man white, 25; woman black, with kinky hair, 28.
- Man white, 48; woman *cafusa*, with "straight" hair, 45.
- Man white, 32, woman *cafusa*, with kinky hair, 26.
- Man white, 21; woman black, with kinky hair, 18.
- Man black, with kinky hair, 45; woman white, 29.

In all cases, the spouses are from the same economic and educational level. In each case also, the personal competence of the spouses is relatively equal.

It is questionable whether, from a realistic point of view, one is justified in using the term "intermarriage" in connection with these cases. Certainly, they are not so thought of in the community. The Portuguese term for intermarriage was coined in recent years by specialists, and it is doubtful if anyone in the community is familiar with it. The term was not heard on the lips of a local resident during the course of this study. Nor are these cases thought of by persons in the community as in any way distinct from other cases of marriage. This is not to say, of course, that local residents are blind to obvious physical differences. If the matter is called to their attention, the fact of physical variation will readily be admitted. The attitude

thereby evoked, however, could well be expressed in the phrase, "Well, what of it?"

The relative absence of comment upon these cases is probably due to the relative absence of class differentiation in the population. In other parts of Brazil, where class distinctions are more marked, a definite line is drawn by white members of the upper classes at marriage with a person from the other end of the color scale; just as a line is drawn, and probably largely for the same reason, at marriages between individuals from the extreme limits of the class scale. The descendants of the old, once proud, families that still live in the community are now reduced in condition to the point where educationally, and otherwise culturally, they are in no way superior, but even sometimes inferior, to persons from families of more humble origin. As the class line has disappeared in the community, the discrimination which is based in class (Pierson, 1942), and in cultural variations identified with class, is also disappearing. Memories of the once slave status of the Negro are becoming dimmer with the passage of time. The former association, in the minds of the whites, of low status with dark color, is thus also disappearing. The difficult economic struggle in which all members of the community share, tends to make the individual's personal competence more and more the primary criterion of his status.

A case reported in the community is illuminating in this regard. A villager recalls that several years ago a cousin of his father, who had been a high official of the State of São Paulo, objected strenuously to his daughter marrying a *soldado da força pública* (member of the military police) who was also a mulatto. "At the table one day," the villager relates, "the girl became obstinate and finally blurted out that she would marry the man, whether her father wanted her to, or not. Livid with rage, he got up and shot her through the heart and then killed himself." "It was his pride," explained the villager. "His daughter wouldn't obey him. And, besides, he had been a high official of the State and his daughter wanted to marry a man who was only a *soldado*." The fact that the local resident laid emphasis upon the threatened disobedience of a daughter and the modest station of her suitor, rather than upon the race or color of the latter, reveals the actual character of the racial situation.

The incident would seem to indicate that cases of opposition of parents to the marriage of a child, an opposition which at first glance would seem to be on racial or color grounds, need to be analyzed further to discover the actual, rather than the apparent, motives involved. Persons from the United States, accustomed from birth to a different racial situation, are sometimes led to see evidences of racial, or color, discrimination where little, if any, exists. In a given case, the discrimination may be real and it may be directed toward a person of color; but the hypothesis that the motives involved spring primarily from racial, or even color, variations needs to be proved. Of her husband's white brother, for instance, a white woman in the village said, "His mother didn't want him to marry Rita. But it wasn't because she was a mulatto. His mother just didn't like Rita's ways. She didn't think she was the kind of a girl who would make a good wife for her son." "My brother's first wife," said a white woman in the local community, "was a black. She had kinky hair. She'd comb it and comb it to try to straighten it. She'd put a hairpin here and a hairpin there. But still it kinked. Yes, she was a black. Everyone admitted that. But she was also pretty, very pretty. And she was a hard worker, too. She even knew how to crochet. She could sing. She certainly was a mighty good woman. She was 'of fine cloth.'"

At the same time, there is a tendency in the local community, as elsewhere in Brazil, to marry a person who is as light as possible. As has been indicated, white color still carries prestige, while dark color has long been associated with low status. For generations the black was the slave and the white man the master and the memory of this situation has not yet completely disappeared.

In the local community, however, this tendency is easily altered. "When João," remarked a white woman of her black husband, "wanted to marry me, my older brother, who was married and living away from home, asked me to come see him and he said, 'You want to look well at that man's color before you marry him.' Then I said to him, 'Did you look well at the face of your wife before you married her?' His wife, you know, is black. And he laughed." "My Aunt Isaura over at Paratinga," said a young farm woman of a white relative, "married a black. That was around 8

years ago. When she was about to marry him, her sister said to her, 'Isaura, how do you have the courage to marry a black man? How can you stand to turn over at night and find that *mico*³⁰⁹ sleeping beside you. How can you do it?' Yes, her sister talked to her that way. But then, later, her sister herself married a black man, a man even blacker."

"My daughter," said a white farm woman, "married a colored man, a dark mulatto. But we were glad to see her married." The implication of the remark was that the important concern was for the daughter to marry; a white man preferably, but at least to marry. "Yes, my husband is black," said another white farm woman. "But there's nothing he doesn't know how to do. He knows how to farm. He can also do carpenter work; he built this house. He can write, too. You should see what a pretty hand he has! What if he is black? Blacks are people, aren't they?"

The only serious objection to intermarriage heard in the community during the course of this study was voiced neither by a white nor a black and came, not from a Brazilian, but from one of the two Japanese families in the community. The parents were objecting to their oldest son marrying a Brazilian girl. The objection, however, was on personal and cultural, rather than racial, grounds, as is clear from the following account of the situation given by the wife of a village official:

The parents of Durvalino are dead set against his marrying Zirda. His mother has become ill over it. She said to me, "That girl will not do for my son. He is poor and needs a girl who knows how to work hard and will live here with us." His mother is right. Japanese women do everything. They wash the clothes, they hang them up, they iron them, and then they go out and work in the fields, with a child strapped to their backs. Zirda wouldn't do that. Besides, Japanese women expect little in return and Zirda likes nice dresses and things. A Japanese son must live with his father's family, too, and Zirda wouldn't like that.

CONFLICT

Conflict of a racial, cultural, national, or class form does not exist in the community. The intensity of the competition existing between the three storekeepers, the owner of the bakery, and the owners of the two *botequins* has been insufficient to provoke any measurable consciousness of

opposition and thus to turn competition into conflict. There is otherwise little competition between individuals for a place in the local economy.

Conflict occasionally emerges out of competition within the family regarding inherited property and may lead to bitterness and spiteful behavior. In at least one case, lawyer's and surveyor's fees have forced the sale of a considerable portion of the estate which thus has passed out of the control of the family.

Rivalry in fishing and hunting exploits, in card playing, in the drinking of *pinga*, in effectiveness of speech and other gestures, in *lidá com a gente* (getting on with one's fellows), in developing other social characteristics which are expected of the individual and which carry prestige, is a common characteristic of life in the community. In this form of conflict, the struggle of individuals usually is subordinated to the interests and well-being of the group; it merely results in the sifting out of individuals in terms of status and prestige.

In a culture where extreme sensitiveness on the part of the individual is a common characteristic, quarrels easily arise and occasionally lead to violence in the form of "crimes of passion." A villager recalls an occurrence some years ago when several men "quarreled and fought" over cattle. "It was early in the morning," he recalls. "None had yet taken *café*. One died of a bullet in his chest and the other with his head split open with a *foice*.³¹⁰ Five fought and two died."

Occasionally, as the result of a quarrel, persons may sulk, refusing to speak to each other over a long period of time. Life, however, must go on. In a society where relations characteristically are primary, contacts only with difficulty can be avoided. Relatives and close friends may try to reestablish cordial relations. If the effort fails and, especially if the incident arises out of activity, political or otherwise, where each individual is supported by a faction, they may become *inimigos* (enemies), irritations and misunderstandings accumulating until mutual dislike and antagonism become permanent. If a man once becomes the acknowledged *inimigo* (enemy) of another, almost without exception, he is an enemy for life.

One's person is inviolate. To touch another individual, except in keeping with local etiquette,

³⁰⁹ Monkey.

³¹⁰ See Tools and Other Equipment, p. 50.

is always resented and, if it be done in anger, is a mortal offense. A serious discussion or quarrel may be carried on with violent gestures which, although they pass all about the face of an opponent, at times coming so close as almost to touch him, are always checked short of that point. To "settle a dispute" with fisticuffs, as is done in some cultures, subsequent to which the disputants shake hands and are once more friends, would be incomprehensible behavior to local inhabitants. No one could understand how a person could lay a hand upon another except under conditions of uncontrollable rage; nor how it would be possible, once violence had resulted, for disputants to become friends again. A serious affront is never forgiven or forgotten.

The "giving of satisfaction" to a person who has been inconvenienced in any way by one's act or omission is an imperative expectation. Otherwise, the person affected will be gravely offended. The lack of consideration which has been shown makes the matter one of "lost face" and lowers self-esteem. Remarkd a villager noted for his culinary skill.

Nero asked me to cook him a *buxada* (dish of tripe). He said he would eat it with me at my house. So, when they butchered Friday, I bought the tripe and cleaned it. He was to be there the next night. But it rained, and I thought he might not come to the village. So I didn't put the seasoning in. I didn't want it to spoil. He was in the village that night, though, and he didn't come up to my house, or send me any word. Early the next morning, when I was on my way to Rio Abaixo to bring back a goat, I met him in the road. I said to him, "How is it that you didn't come to my house last night?" He said, "Get the *buxada* ready today; we will have it tonight." So I went ahead and fixed it. I put in the seasoning, I cooked it, I put it on the table. But he didn't come. This morning, the *buxada* was all spoiled. Then someone told me the fellow had been in the village again last night. That made me mad. To think he had not come around to "give me satisfaction!" This morning, I saw him in Sebastião's store, buying some things. As I went by, he looked around and saw me, but he went right on with his talk. So I turned around and passed the store again to see if he'd come out to "give me satisfaction." But he just kept on with his talk there in the store. So I went up to him and I said, "How is it? You said you'd come up to my house last night and eat *buxada*. I got everything ready and waited for you. And you didn't come." He looked a bit embarrassed and said, "It was raining." "It didn't rain yesterday," I said. Then he said I should prepare another *buxada* for next Sunday and he'd pay for it. The storekeeper spoke up and said, "No, you must pay Quim. He's gone to a lot of trouble and it's only right that you should

pay. Next Sunday, if you want to, you can have another *buxada*." Nego looked around at me. I said to him, "Yes, you pay me now for what it cost me and if you want, I'll fix another for next Sunday." So he rammed his hand down into his pocket, jerked out his pocketbook and gave me a 200 cruzeiro bill. I gave him back 140 cruzeiros and kept the rest.

That's the way it goes. If he'd "given me satisfaction," if he'd come up to the house yesterday and said, "I couldn't come last night because of the rain. How much did it cost you? I'll pay for it and then we'll arrange another *buxada* some other time," I wouldn't have charged him a thing. But since he didn't "give me satisfaction," I charged him plenty.

A limited degree of conflict in the form of a struggle between religious sects, as has been indicated, has appeared in the community in comparatively recent years. The long-standing monopoly of Catholic belief and practice is beginning to be challenged; not yet seriously, but increasingly. The principal competitors are three Protestant sects,³¹¹ although the influence of the Spiritualist cult,³¹² with its techniques for treating illness, is also beginning to be felt.

At the *reza* on the Saturday evening which preceded the baptismal ceremony, held in the creek near the village, of which reference was made in the section on *Evangelistas*, the *padre* seriously admonished his parishioners not to attend the ceremony. "This evening," he said, "everyone should send up his prayers with fervor. It is fitting that we should show our great love for God, especially at this time. This offense that is to be committed on the morrow, God in his great mercy will know how to deal. For the kindness of God is infinite. But we who are Catholics and whose fathers were Catholics and whose grandfathers were Catholics, must keep to our religion. We must be persistent and persevere." At the hour appointed for the ceremony, a special Mass was arranged and held in the church. Not all parishioners, however, as has been indicated, remained away from the baptism. "I've never seen anything like this is supposed to be," remarked a villager. "What will it hurt if I go and see what it is like?"

As also has been indicated,³¹³ the principal form of conflict in the community is the struggle between political factions. The intensity of this

³¹¹ See *Evangelistas*, p. 176.

³¹² See *Spiritualism*, p. 182.

³¹³ See *Political Behavior*, p. 184.

struggle, however, is probably not as great today as formerly. A local resident recalls:

Many years ago, when I was a young man, people were more wild over politics than they are today. There were all sorts of trouble at election time. All the musicians in the village band belonged to the same party. At night they would get together and march out into the street and play, while their friends shot their guns off into the air. The leader of the other party was a man named Juca. He was a resolute fellow. The day after the band came out for the first time, he went to São Paulo and brought back musical instruments and gave them to persons in his party who also could play and then there were two bands in the village every night, trying to drown each other out. Each party also had its own soccer team. There were fights almost every day. Four *soldados* were stationed in the village then, instead of only one, as there is today. But if they had tried to interfere, they would have gotten into serious trouble. Both parties had lots of followers and the men were all fighters. One night the leader of one party thought his house was going to be attacked. He heard an awful racket. He blew out the lantern and grabbed his gun and waited. But nothing happened that time. There were killings, though. It's a good thing it's not that bad any more.

Strife between political factions probably still is, however, as also has been indicated, the greatest single force making for disunity in the community. At the same time, the old alignments are being broken up by the comparatively recent emergence of new political forces, represented by new political parties. The former clear-cut and relatively permanent division in the community is no longer evident.

At present, factional rivalry does not seem to divide neighbor against neighbor to the point where the ordinarily intimate, personal relations common to the village are significantly disturbed, unless there are also present, in one or more of the disputants, certain psychic or social characteristics which at the same time increase difference and tend to focus attention upon it.

This is the situation in the case of the present leader of the minority party in the community. Many persons think that both he and his wife give evidence of an air of superiority toward their associates which is strongly condemned in the local mores. The man and his wife are both resolute persons who are accused of disparaging most other persons in the community and of seeking to force their will upon them. The resentment this arouses is intensified by the fact that the wife tends to assume a role in local political and other activities which is out of keeping with the accepted

pattern of behavior on the part of a woman. On the occasion of the last election, for instance, she was much criticized for electioneering activities. A village woman remarked:

I and Dona Francisca, the wife of Miguier, were great friends until she began to try to force her ideas about politics upon me. That's something I won't permit. And so we quarrel and we fight. Everything I want to do she puts a stop to it if she can, and everything she wants to do I put a stop to if I can. She comes here in the house of my neighbor and begins to say nasty things about me. She knows the walls are thin and I can hear everything she says. That's why she does it. I've just told my neighbor that if she lets that woman keep on insulting me in her house, I'm going to do something about it.

Another woman remarked:

She's a "bone" here in the village. She just makes me sick! One day I heard her shouting out there in the street that her husband was the only man here who had any character. It made me so mad I wanted to go out and fight with her. My husband also has character; hers is not the only one.

The principal source of conflict in this case, however, would seem to lie, not in the fact that the man and his wife are political opponents of most persons in the community, but rather in their failure to seek to maintain primary relations with their associates. The fabric of local society is so tightly woven that all elements must either be assimilated or expelled. There is no middle ground. Mere differences of opinion can be tolerated; unfriendly attitudes, however, are definitely against the mores. (See *Solidarity*, p. 197.) The man in question, although of the same economic and educational level as members of the community, worked for several years as a truck driver and thus had considerable contact with the outside world. He tends to inject into his relations with persons in the community a secondary character which is alien to it and hence difficult to understand; and, since it is difficult to understand, it is feared and resented.

The ambition and concern for money evidenced by this man, both of which characteristics also are alien to the local mores, increase a resentment with reference to him which sometimes is voiced in almost violent terms. "He would squeeze money out of his own mother," a villager remarked. "That fellow is an *embrião* (shyster)," said another villager. "He doesn't cheat Christ only because Christ has never been here." "Yes," remarked a

third villager, "and he's always thinking he's so much better than everyone else and trying to get ahead of them."

So intense is local feeling toward this man that it almost led to violence on the occasion of the last election. It did lead to violence sometime later. A villager recalled:

Miguer (the man in question) and Chico had a fight day before yesterday. It was a terrible battle. I was there in the *botequim* when Chico's boy came in, crying, and shouting that they were killing his father. It seems Chico was saying nasty things about Miguer there in the store, when suddenly he came in. "Did I hear you say I was a *calotêro* (one who doesn't pay his debts)?" Miguer shouted. Chico said yes, he'd said that and that it was the truth. So Miguer grabbed him by the shirt and struck him a blow that knocked him down. And when he got up, he gave him another blow and down he went again. Then Miguer piled onto him and began to pound him and pound him. Just then Roque (a brother-in-law of Chico) came in with a club and swung at Miguer. But someone who was standing by had just stepped in to try to separate the fighters and part of the blow fell on his arm. But Miguer got part of it on his head. Then Roque's two brothers came in, swinging clubs. But, by that time, the other people who were standing around had separated the fighters and someone was taking Miguer out of the store and up to his house, while the others were holding Roque and helping Chico up. I'll tell you that if they hadn't stepped in, Miguer would've been dead by now; Roque and his brothers would've finished him with their clubs, right then and there.

The fight immediately became the principal topic of conversation in the village. Small groups of men gathered in the growing darkness to talk in low tones. That this quarrel and violence, however, had more of the character of in-group than of out-group conflict is borne out by the comment of two villagers, both of whom are opposed, politically, to Miguel. "I'm glad Chico got it," said one. He's no good, either. I don't like Miguer, but he's a better man than Chico. He takes care of his own life and doesn't go around looking for trouble." "So far as I'm concerned," said another villager, "they should not have stopped the fight. If they'd done away with each other, it would have been a good riddance for the village."

Conflict with undesirable or unassimilable persons from the outside is considered in the following section.

SOLIDARITY

The local society is strong and vigorous, capable alike of the ready assimilation of desirable new ele-

ments as well as the positive and uncompromising expulsion of undesirable new elements. The number of incoming migrants, as has been indicated, is small, a fact which facilitates their incorporation into the local society and diminishes the change which they might bring. At the same time, so tenacious is the social organism that it might be expected to incorporate into itself a considerable number of new elements without suffering appreciable alteration.

Whether the new element will be assimilated or cast out depends upon the attitudes and social and personal characteristics of the newcomer. Local inhabitants are self-respecting; they are proud of their village and community. If the newcomer gives positive evidence that he likes the people among whom he has come to live, and if it is also clear that he possesses the personal characteristics which are encouraged in the community, such as friendliness, modesty, willingness to oblige, and conformity to the local mores, he is apt to be readily accepted. If, on the other hand, he indicates by act, speech, or other gesture that he holds any unfavorable attitude toward the people among whom he has come to live, or if he is lacking in those personal characteristics which are considered imperative, the organism, as it were, will contract and leave him isolated on the outside. If this disparagement of local residents and community be pronounced or continued over a considerable period of time, he may find himself not only under the negative sanctions of social disapproval but actually expelled physically. To disapproval, dislike, and condemnation may be added violence. It would seem that the adhesion of the parts of the social organism is so great and the primary relations which occasion it are so intimate and demanding that there can be no middle ground: either the new element is absorbed or it is expelled.

These general statements are borne out by what happened, on the one hand, to the *soldados* Vicente and Gilberto, "the pharmacist" and "the Rio-grandense;" and, on the other hand, to the school teacher Anita and the Japanese storekeeper and his family.

The *soldado* Vicente was a young, unmarried man from Ceará. He had been assigned to the village in keeping with the customary practice of the State Government to put a police officer at the

disposal of the local *sub-delegado* to aid in enforcing the law. Vicente was inexperienced, brash, filled with self-importance, and indiscreet. He was soon heard to speak slightly of persons in the village and of the village itself. These remarks were almost immediately known to everyone in the community. But they were passed over in silence. Attitudes of disapproval and dislike, however, immediately formed against him. These attitudes first made themselves evident in the difficulty he encountered in finding someone in the village to wash his clothes, in spite of the fact that work of this sort usually is readily accepted, since several widows are in need of increasing their meager incomes. And, although he needed someone to prepare his meals, since there is no hotel or pension in the village, no one seemed to be willing to do so. He eventually discovered also that when he purchased fruit or similar items of a villager, he had to pay much more than is customary in the community. In other words, the local society, as it were, was closing up against him.

The *soldado* Vicente had been in the village a few weeks when, one night, he was talking to a village storekeeper and leader, in the presence of a mutual acquaintance. The conversation had to do with prices in comparison with those of former times, the attempts of the Government to control production and the difficulties of transport. An undercurrent of antagonism was soon apparent. From time to time, Vicente revealed, in some remark, his dislike for the village and villagers. It was not long before whatever one came to say, the other contradicted. Then Vicente remarked, "The soil of northern Brazil is rich but it doesn't do any good to gather the crops or to plant new ones because they just pile up. There's no way to move them to market." And he added, "Here in this community, there's plenty of transport but the Paulistas²¹⁴ are *vagabundos* (good-for-nothings); if it wasn't for the Italians and the Japanese who've settled in this State, it would be worse off than Ceará." The face of the storekeeper became livid with rage. Coldly and deliberately, with a great show of restrained emotion, he said, "For me, there is no greater *vagabundo* than a *soldado* and if it's so good there in the North, what are you

doing here? Why, you — (using a vigorous and obscene expletive)! Go back to Ceará! No one asked you to come to this village!" Rising from the table and beating on his chest, he added, in increasingly strident tones, unconsciously and quite revealingly dropping into the formal and rarely used mode of address, "I, Sebastião, will put thee out of here myself." The situation became charged with deadly menace as the *soldado* fingered his revolver. The third person present then said, "Seu Vicente, you should not speak ill of the village here because the people love this place like you love Ceará." "But I was only kidding," said Vicente, "and Seu Sebastião got all excited."

"And I'll always get excited," replied the storekeeper, "whenever I hear anything like that. I live here. My parents and my grandparents lived here. We have struggled here and we have suffered here, but we have never complained of this place. And now a mere *soldado*, who doesn't do anything but loaf around all day, who spends all his time playing cards, comes here from Ceará and speaks ill of us. Get out! No one asked you to come here!" And the storekeeper left the room.

The following day was Sunday. Vicente came to Sebastião's store and, as the latter said later, "talked as if nothing had happened." "For me," he added, "that incident was a serious thing. I'll never treat that fellow the same way again. All of us here are tired of him, and now he knows it." A little later that day, the *soldado* left the village in a truck which happened to be going over to a neighboring town. With him was his rifle, pack, and the few household goods he possessed. He has not been seen in the village since.

When he was told that Vicente had left, an elderly villager remarked, "That fellow! The very first day he was here, I was standing in front of the *botequim* talking and some young men about half drunk were galloping their horses up and down the village streets. I was saying that they ought not to be allowed to do that; that the village was no race track and that the first thing you'd know, someone would get hurt. The *soldado* heard me and do you know what he said? 'So far as I'm concerned, all these people here can be run over. An atomic bomb can fall on them, and it'd be the same to me. The only thing I want to see is that no one gives me any trouble

²¹⁴ Persons native to the State of São Paulo.

there at the jail.' Can you imagine that? A man who earns his living keeping the peace comes to a village like ours and he talks like that, making light of everything and everyone and then not doing his duty when it's pointed out to him." "Yes, he was no good," another villager agreed. "We once had a *soldado* sent here," he added, "who liked it so well, he spent his whole life in the village."

The *soldado* Gilberto succeeded Vicente. He brought with him to the village his wife and seven children. He was a modest and unassuming man and as such quite acceptable to the villagers. He and his family, however, were Protestants in an almost entirely Catholic community. They had formerly lived in the city of São Paulo and felt out of place in the village. The *soldado* was once heard to remark that he had never seen "so *caipira*"³¹⁵ a people. The family remained somewhat aloof from their neighbors. They participated in none of the customary public gatherings, either religious or secular. They felt unaccepted and increasingly ill at ease. Although in no way actually repelled or even threatened with expulsion, as was the *soldado* Vicente, Gilberto, after a few months in the village, sought and obtained a transfer to a post in another community.

The man whom villagers refer to as "the pharmacist," came to the village with a small supply of drugs and patent medicines. A villager recalled:

He lived right next door to me in Nhã Benta's house. No one liked him. He went around acting so superior. He was a rude fellow and full of complaints about everything. Once he wanted to borrow some sugar of me; I was glad to let him have it. The sugar was coarse but it was all I had, and it was good. A few days later he sent some sugar in return; it was "sugar of the first quality." "That's the way it is!" he said. "Here in the village, people lend you common, ordinary things and then you have to pay them back with first-grade stuff. He was always saying nasty things like that. He didn't know what every *caipira* knows: that to keep people from disliking you, you must learn to get along with them. He ended up by leaving here.

Renato came to the village from Rio Grande do Norte. He was soon known and referred to in the community as "the Riograndense." When he had been in the village a few months, he was attending, one day, a religious festival. Geraldo, a young

man in the village, considerably under the influence of *pinga*, had purchased a small trinket of a traveling peddler and had refused to pay for it. The peddler was from the northern State of Pernambuco. Renato, feeling an affinity with the peddler by reason of the fact that he also was from a northern State, intervened in the matter. At the time, he also was considerably under the influence of *pinga*. Grasping the shirt of the young man, he began to shake him and to demand that he pay. A fight resulted and several blows were exchanged, in the course of which the shirt was torn. The disputants were soon separated by bystanders. Renato, however, continued his comments in a loud voice. At this point the *soldado* came up and inquired what was going on. One of the bystanders undertook to inform him. He said that "the Riograndense" had torn the shirt of the young man, and that he could not expect to make him pay for the trinket by using such methods. Whereupon Renato turned to the bystander and shouted in a loud voice, "You are not my friends. Not a single one of you in this accursed place. You listen only to Gerardo because he's one of you." The bystander did not at first reply. As Renato continued his remarks, however, he finally turned and, in a cold voice, with deadly intent, said, "I have no fear of any man like you; we'll settle this matter." The *sub-delegado*, however, who meanwhile had been informed of what was occurring, arrived at that moment, and he and the *soldado* separated the contenders and put an end to the quarrel.

After Renato had left, bystanders recalled other instances in which, as they said, "the Riograndense had shown disrespect for persons in the village." Meanwhile, Renato was saying that he would leave the community; that he "wouldn't stay in a place where he had no friends and no one liked him." Arming himself with a *garrucha*, he went about his affairs in the village in a belligerent mood. Two days later, he left the community. A villager was heard to remark, "*E já foi tarde* (He stayed too long as it was)."

Of quite different character, however, were the experiences of the school teacher Anita and the Japanese storekeeper. The school teacher came to the village 15 years ago. She was pleasant in manner, friendly and tactful. Although her schooling had been more extensive than that of

³¹⁵ See *Caipira versus Cidadão*, p. 107.

anyone in the community, she was modest and unassuming. Some time later, she married a local young man. At present, she is not only considered by villagers to be one of themselves but is also a village leader. (See Leadership, p. 207.) She has been completely assimilated. Her attitudes, sentiments, and beliefs are closely identified with those of the community.

The Japanese storekeeper, with his wife, moved to the village 13 years ago. Their five children have since been born there. Both he and his wife have always been considered by local inhabitants to be modest, unassuming, and friendly persons. They were soon made to feel so welcome that when a few years later, other families of Japanese who had migrated to the community moved away, they remained in the village. They now speak the *caipira* dialect, although, with the exception of the children, it is with a Japanese accent. They attend Mass in the village church, join in the processions, and otherwise take part in all religious activities. The children of school age attend the village school. The husband and father participates in local politics, supporting the majority group actively and effectively. He recently contributed part of the money to open the bus line referred to elsewhere. (See Transportation, p. 95, and Isolation and Contact, p. 104.) And, perhaps most significantly of all, he is now a *compadre* to 34 persons in the community.

STATUS AND PRESTIGE

Age is a definite determinant of status. Older persons tend to have more prestige than younger. Parents tend to have greater prestige than children, even if the latter are grown. On those farms where three generations are living together, the grandfather occupies a superior position as head of the family, with more prestige than any other member. The status of the grandmother is also superior to that of any other woman. Older persons are often heard giving advice, in tones of positive conviction, addressing every younger person present, even adults, as if they were children. Invariably they are listened to with attention and respect. To interrupt them would be considered extremely "poor form." When addressing an elderly person, one ordinarily prefaces the name with the term *Nhô* or *Nhá*, a cus-

tom which probably is a heritage of the slave epoch when the master was known as *Sinhô* (from Senhor, *master*) and the mistress as *Sinhá* (from Senhora, *mistress*).

The significant role of age in determining status is probably due to the fact that in a community which long was nonliterate, and still is to a considerable extent, the personal knowledge and skills accumulated through years of experience are of vital importance in everyday living.

It is doubtful if the terms "class" and "caste" are useful in analyzing the local society. Differences in prestige exist within the community, but they are defined in each case by age, sex, or individual variations. They are to be found within families. Moreover, the persons who possess most prestige in the community do not think of themselves as belonging to a group apart from other persons.

The son is not compelled to follow the same employment as his father. In other words, there is no inheritance of occupational function and no fixed form of occupational status into which the individual is born and out of which he cannot pass during his lifetime. The order is a mobile order, in which the individual is free to move from one occupational role and position to another.

At the same time, actual mobility with reference to occupational roles is minimal. As has been indicated, occupational variations in the community are extremely limited. Almost all the inhabitants work the land. There are few sons who do not follow the same employment as their fathers. To do otherwise almost always requires that one leave the community. Most of the limited number of men who at present are engaged in preparations for quarrying, also occasionally work on farms. The only other persons who were born in the community and who are not at present engaged in the same occupation as their fathers, are the three storekeepers; the owners of the two *botequins*; the *sub-delegado* who also is one of the two local carpenters; the village horseshoer, who also works at barbering and shoe repairing; the tax collector; the *fiscal*; and the registrar of vital statistics. Of these 10 persons, however, 7 themselves own farm land, the cultivation of which they oversee and on which they themselves occasionally work.

There is, however, inheritance of function as between the sexes, not only in the obviously biological sense but also, as indicated in detail else-

where,³¹⁶ in the sociological sense. The roles of men and women are separate and distinct. That which a man can, and is expected to do, and that which a woman can, and is expected to do, are clearly defined. The distinction becomes apparent early in life and subsequently rarely changes. The social order in this respect is relatively fixed and immutable. Only four women in the community are at present exercising roles which are different in kind from that of their mothers: the postmistress, the school teacher, the principal midwife, and the wife of the leader of one of the local political factions. All of the four women, however, exercise these roles only in addition to the usual function of wife and mother. The school teacher, the postmistress, and the midwife have gained prestige in their new roles. The activities of the wife of the political leader, however, which are carried on apart from her role as wife and mother appear more to be tolerated than accepted, and consequently are lacking in prestige value.

This difference in function makes the sexes interdependent and consequently is a unifying rather than a divisive force in the community. So extensive is this interdependence that, should a young husband die, the widow, unless in due time she marries again or unless she is aided by her own or her husband's family, may suffer privation. The dependence of the man upon the wife is especially evident in the case of a widower, particularly if he has small children. Without the assistance of his own or his wife's mother, a sister, or a second wife, it is extremely difficult for him to care for his children. These diverse activities of husband and wife are complementary and thus readily organized into *conserted* activities. Individual behavior thus tends to become *conserted* behavior inside the family and the unit to take on the characteristics of a small society.

As previously indicated in detail, these differences in function are accompanied by differences in status. The position of woman is definitely inferior to that of man, a condition which attaches to the girl even before birth—boy babies are preferred to girl babies—and continues throughout life.

The prestige of a given individual may be increased by the specific role he plays in the com-

munity to the exclusion of everyone, or almost everyone, else. The holding of certain offices, for instance, automatically enhances the prestige of the individual. Greatest prestige probably attaches to the offices of *padre* and those of local officials, especially the *sub-prefeito*, the *sub-delegado* and, to a somewhat lesser extent, the *fiscal*, the village registrar of vital statistics, and the tax collector; prestige being enhanced or decreased, in the case of an official, by the degree of success in obtaining the satisfaction of local needs by way of influencing governmental functionaries outside the community. The mail carrier, by reason of his appointment as a permanent employee of the Government, also has considerable prestige. Other local functions, like that of the village bell ringer, the *fogueteiro* who handles the fireworks at *festas*, the auctioneer of *prendas*, and the members of the village band, carry considerable prestige, as also do those of the school teacher, the principal midwife, the *curandeiros*, and the "blessers." The more the individual who is exercising a given role corresponds to the expectations associated with that role, the higher the prestige he himself enjoys; and the less he corresponds to these expectations, the lower the prestige. The length of time a role is satisfactorily exercised is another determinant of status.

The title of *doutor*, long used in Brazil to refer to a person who has graduated from a professional school of law, medicine, or engineering, carries locally, as elsewhere in Brazil, considerable prestige. No one in the community, however, is addressed in this way. In the immediate family of the school teacher, who came to the village 15 years ago and who, as indicated, has been extensively assimilated into its life, there are graduates of a law school, a fact which, although these persons live elsewhere, tends to raise her prestige in the community. Proudly she says, "*Meus irmãos são doutores* (my brothers are 'doctors')."

Although the possession of land and other property increases prestige, it is not in itself sufficient to give the individual superior status. As indicated elsewhere, there are living in the community at present no *fazendeiros*, or large landowners who oversee but do not themselves work their land, similar to those to be found in many areas of Brazil as also in this community in the past. Two farmers would seem to be in process of becoming

³¹⁶ See Relations between the Sexes, p. 132, and Role and Status of Woman, p. 134.

fazendeiros but neither yet possesses the requisite characteristics to give him the status which ordinarily accrues to that position. A few scions of families which once belonged to this class are still to be found in the village and surrounding area, but they live near the bare subsistence level and their position in the community in no way is superior to that of other residents.

Regret for the reduced status of a family which once belonged to the *fazendeiro* class is apparent in the following remarks of a descendant of one of these families:

I should have done better in life. Our family wasn't like these *caipiras* around here. They were *gente fina* (refined people). I was once in school; but then I had to go to work with a hoe and I forgot everything. I can't even write now. The old gentleman, my uncle, he was a *man*! You won't find another person like him. He was full of courage. He was intelligent like no one else and as strong as an ox. He lived to be 90 years old, and when he died he still had two rows of good teeth. He learned many things from his father. My uncle was the *chefão*³¹⁷ around here, the biggest *fazendeiro* anywhere about. If this place needed something from the politicians, he went to São Paulo and got it. He was once the president of the *Assembléia* (state legislature). The men there all had great respect for him. They were men whose goatees were white;³¹⁸ they knew what they were doing. My uncle had all kinds of fine clothes, a cutaway, a top hat, everything. When he needed to, he'd put on clothes with the best of them. But he was a modest man and went about his farm dressed like everybody else. He finally lost everything he had, though, and when he died all of us were left with nothing. No one today has influence like he had. No one here does anything like he did.

There is little or no difference, so far as status is concerned, between villagers and the inhabitants of the surrounding area. In the village, the concentration of houses obviously is greater and contacts between individuals consequently are increased in number and intensity. A villager is thus in perhaps a more advantageous position to develop that *modo de tratá os otro* (way of getting along with other persons) which is so admired in the community. Villagers ordinarily are less shy and reserved. Persons with as high a degree of prestige as any villager, however, are to be found among local farmers.

Prestige attaches to the *brasileiro* (Brazilian); foreigners of whatever origin tend to occupy a position somewhat below that of the native-born.

This condition, however, is effectively modified by primary contacts and, in the event of marriage into a local family, by familial relations, as well as the personal characteristics of the individual. There is also a readiness to accept all children born in Brazil, of whatever parentage, on equal terms with other Brazilians. In this connection, a common statement is "*Ele é brasileiro, não é?*" (He is a Brazilian, isn't he?)"

Status is little, if at all, determined by either race or color. Among village leaders are persons whose skin is quite dark and whose other physical characteristics give indisputable evidence of Indian or African ancestry. There are no pure, or relatively pure, Negroes among village leaders, but this is probably due, at least in large part, to the fact that there are at present no blacks in the community whose personal characteristics are sufficiently superior to those of others to make them leaders. Memories of two Negroes, now deceased, who appear to have once enjoyed a high degree of prestige in the village, are still vivid. The present *leiloeiro*³¹⁹ and one of the *capelães*³²⁰ are blacks, each of whom is extensively admired and enjoys a considerable measure of prestige. Of the *capelão*, a village leader, a white man, remarked:

There is *um home bão* (a good man)! He's a hard worker. He's good to his wife and his children. He's poor but he always manages to get together enough money to keep from owing anyone. He goes to Mass. What he says you can depend upon. Every word that comes out of his mouth is always the truth. There is a good man! If everyone was like him, the world would be a much better world.

A primary determinant of status in the community are the personal characteristics of the individual. The characteristics most admired are modesty, sincerity, willingness to work hard, and consideration for other people. The possession of one or more of these characteristics increases prestige; its lack decreases prestige. To "consider oneself superior to others," for example, definitely lowers a person in the estimation of his fellows. It is the greatest defect a local inhabitant can possess.

In the case of a man, to be a "good hunter" or "good at fishing" increases prestige. Speaking of an individual who is widely respected and admired, a village official remarked, with a consid-

³¹⁷ Augmentative of *chefe* (leader).

³¹⁸ That is, whose age implied wide experience and, consequently, commanded respect.

³¹⁹ See Division of Labor, p. 58.

³²⁰ See Sacred Functionaries, p. 146.

erable show of approval, "He's the 'chief' among the hunters here; of all of them, he's the best." To spend all one's time hunting or fishing, however, is frowned upon. One hears in this respect the phrases, *só vive pescando* (he spends all his time fishing) and *tá sempre bateno no mato atraís de caça* (he's always in the timber running after game).

Perhaps nine persons in the community have greater prestige than their associates. All are men. The characteristics which, in each case, determine superior status were indicated by persons intimately acquainted with the community to be as follows:

Individual 1.—Age, descent from a family long in the community, superior intelligence, competence shown as a village storekeeper and former local official, ability to use wit and humor in personal contacts, an economic condition above the average in the community.

Individual 2.—Age, superior intelligence, membership in a family prominent in the community, competence shown as a village official and local political leader, conversational ability, initiative in supervising road building and in developing a bus line.

Individual 3.—Age, reputation as a "hard worker," competence shown improving a farm.

Individual 4.—Age, an especially pleasant and friendly manner, conversational ability, competence shown as village official and in developing a farm.

Individual 5.—Age, superior intelligence, conversational ability, competence shown as a local official and political leader.

Individual 6.—Position as village *padre* and local representative of the traditionally respected ecclesiastical authority, superior education.

Individual 7.—Reputation as a "hard worker," competence shown as a former village official and present local political leader, facility of verbal expression, "connections" with political figures in São Paulo, knowledge of the world outside the community, ability demonstrated as resident administrator of a local *fazenda*.

Individual 8.—Descent from a family long in the community; competence shown as a village official, as a hunter, and as a prescriber of drugs in cases of illness; constant good humor; ability in conversation and joking.

Individual 9.—Competence shown as a former village official and present local political leader, facility of verbal expression, ability demonstrated in building and supervising a mill for grinding maize, an economic condition above the average.

With reference to 14 other persons, whose status in the community is perhaps only slightly less, the characteristics which appear to have increased prestige include age, male sex, membership in a prestige-bearing family, the holding of an office, the ownership of land, occupational competence,

special ability (shown, for example, as village bell ringer, *capelão*, auctioneer of *prendas*; in playing the *violão* or one of the instruments in the band; preparing foods; making baskets, fire-works, and pottery; playing cards or soccer; preparing for a *festa* and leading portions of it like the dances which are dedicated to São Gonçalo); and certain personal characteristics, such as superior intelligence, self-confidence and ability demonstrated in conversation, in developing and maintaining primary relations, in accommodating oneself to variant situations and in "playing politics."

To the above-mentioned characteristics, however, there must be added in the case of each individual who would enjoy superior prestige, certain other characteristics which are considered indispensable in every person. Among these basic requirements are modesty, sincerity, a willingness to work, friendliness, pleasantness of manner, hospitableness, a readiness to oblige, loyalty, tolerance and (in the case of a married man) competence in providing for one's family.

If, on the other hand, one analyzes cases of individuals with inferior status in the community, the characteristics which especially make for lowered prestige would seem to be youth, female sex, aversion to hard work, occupational incompetence, inability to get on with other persons, low status of the family of which the individual is a part, inferior intelligence, failure to marry (in the case of a woman), foreign origin, excessive use of alcoholic liquors, destitute economic condition, in addition to the lack of one or more of those characteristics which are considered essential in the case of every individual.

In the conversation of local inhabitants, one often notes phrases which tend to define the sources of prestige, or lack of prestige, in a given individual. Included among these phrases are the following:

Age

Ele é home de idade, de juízo
(He's a man of years and judgment)

Ele tem experiência
(He's a man of experience)

Com cinquenta ano já tem mais pensamento
(By the time a person is fifty years old, he has more judgment)

É ainda muito moço
(He is still very young)

Family Affiliation

Ele é dos Barreto
(He's one of the Barretos)
A família dele num presta
(His family is no good)
Ele é de boa gente
(He comes from a good family)

Sex

Quem canta é o galo
(It's the rooster that crows)
Muié num dá pra isso
(A woman is no good for that)
Muié num tem cabeça pra isso
(A woman doesn't have a head for that)
Uma muié de oro num vale um home de barro
(A woman of gold isn't worth a man of clay)

Occupational or Other Competence

É home que sabe lidá cô a terra
(He's a man who really knows how to farm)
Ele sabe cuidá da lavôra, sabe fazê tudo
(He knows how to do everything on the farm)
Ele tem influêcia na política
(He has political influence)
De cesta, ele fais o que qué
(Of baskets, he can make whatever he wants to)
Ele trabalha com a taquara que é uma beleza
(He does beautiful work with *taquara*)
Ela fais quarqué cousa com barro
(She can make anything of clay)
Ele intende de música
(He knows music)
Ele às veis quasi puxa uma varsinha no sino
(At times he almost plays a waltz on the bells)
Até de fora mandam buscá ele pra tocá
(Even people from other places send for him to play for them)
Ele é pescadô de mão cheia
(He's a fisherman "with full hands"; that is, he's an able fisherman)
No mato, ele vale mais do que um cachorro
(In the woods, he's worth more than a dog; that is, he's a good hunter)
Ele cozinha mió do que quarqué muié
(He cooks better than any woman)
Num há o que ele num saiba fazê
(There's nothing he doesn't know how to do)

Economic Condition

Nasceu pelado e agora tá vestido
(He was born naked and now he's dressed up; that is, he was born poor and has improved his lot)
Ele é home de posse
(He's a man of means)
Ele é meio arrumado
(He's rather well off)
Ele mora em baixo do chapéu
(He lives under his hat)

Ele num tem um gato pra puxá pelo rabo
(He hasn't even a cat whose tail he can pull)
Ele é um pé rapado
(He's a scraped foot; that is, he owns nothing)

Personal Characteristics

Ele sabe lidá com a gente
(He knows how to get along with people)
Ele é muito dado
(He makes friends easily)
Ele é muito trabalhadô
(He's a hard worker)
Ele é de boa cabeça
(He has a good head)
É home que vê longe
(He's a man who can see a long way ahead)
Ele é caipira sabido
(He's a smart *caipira*)
Ele sabe entrá e saf em quarqué lugá
(He knows his way around)
Ele é caipira viajado
(He's a *caipira* who has been around)
Ele sabe falá
(He's a good talker)
É home muito sério
(He's an upright man)
Ele é muito alegre
(He's always in a good humor)
Éle tá sempre brincano e rino com a gente
(He's always joking and laughing with you)
Ele num bebe, num tem vício nenhum
(He does not drink; he has no bad habits)
É muié muito distinta
(She's a very fine woman)
É muié bem educada, de muito préstimo
(She's a woman who has been well brought up; she knows how to do everything)
Ela é uma moça de muito respeito
(She's a girl who is worthy of respect)
Ela é muito boa, trata todos muito bem
(She's a good woman; she treats everyone well)
Tem gente que é soberbo
(Some people are "stuck-up")
Só por pô uma gravatinha no pescoço, num enxerga mais a gente
(Just because he put a tie around his neck, he can no longer see a person)
Quano chegô aqui, tava co as carga furado; hoje num cumprimenta a gente mais
(When he came here, his trousers had holes in them; today, he no longer speaks to you)
Ela é chereta, qué tomá conta de tudo
(She keeps sticking her nose in everywhere; she wants to "boss" everything)
Ele vive com uma mão adiante e otra atraís
(He lives with one hand in front and the other behind; that is, he is a loafer)
Ele num enxerga um parmo adiante do nariz
(He cant' see an inch in front of his face; that is, he's stupid)

Ele nem falá sabe

(He doesn't even know how to talk)

Home que hoje diz uma coisa e amanhã outra, num serve; precisa um que diz pedra é pedra

(A man who says one thing today and another tomorrow, will not do; what is needed is a man who, when he says it is a rock, you know it *really* is a rock)

Ela tem cabeça dura

(She has a thick head)

Ele é muito estúpido

He's very stupid)

Ele é burro

(He's an ass)

Ele é bobo

(He's a fool)

O estado normar dele é bebido

(His normal condition is to be drunk)

É um pau d'agua

(He's a soaked log; that is, a "soak")

Ele é brigão

(He's always picking a fight)

Ele é vagabundo

(He's good for nothing)

Ela é uma muié falada

(She's a woman that people talk about)

É muié sem brio, sem vergonha na cara

(She's a woman without shame)

Differences in status, with the exception of those due to age or sex, are not readily revealed in the course of the daily life of the community. In fact, merely casual observation might give the impression that, with these exceptions, the different members of the community occupy identical social positions. Persons of inferior status tend to be treated with a courtesy and consideration which belie their actual position. Differences in status are revealed not so much in direct behavior as in attitudes which are casually revealed, usually when the individual in question is not present. This fact is illustrated in the following incident. A group of men at a village store was joined by a man called Tico. Upon entering the store, he spoke to all present and was cordially spoken to in return. Barefoot, ragged, dirty, and with his eyes bleary from the effects of alcohol, he leaned up against the counter and asked for *pinga*. He was served by the owner of the store just as anyone else would have been served. "*Como vai a vida lá pelo sitio?*" (How does it go there on the farm?) the storekeeper asked, in the same tone of voice he uses to speak to a close friend. "So-so," was the reply. Tico remained a while in the store, listening to the conversation which continued as before. Finally, he said, "Tá bão,

vô ino, té logo pra meceis (Well, I'll be going. Goodby to you gentlemen," and left the store. "*Té logo!*," called after him each person who was present, in a courteous tone of voice. Following a moment of silence, however, the storekeeper remarked, "That fellow is ruining himself with *pinga*. He sold a patch of timber some time ago and got nine *contos* for it. I'll bet he hardly has anything left." "He never was much good," said a bystander. "And when he got all that money, it was the worst thing that could have happened to him."

LEADERSHIP

Leadership in the community is exercised in hunting and fishing activities, in the *rezas*, Masses, processions and other religious ceremonies, in planning and carrying through *festas*, in the formation of public opinion, especially in connection with political activities, and during personal, family, or community crises. In a special sense it was recently exercised in the development and carrying through of plans to establish the local bus line, referred to elsewhere.³²¹

Leadership is to some extent a function of official position; but it is more often, and to a much greater extent, a function of personal competence. Although a few individuals are expected, by reason of the offices which they hold, to develop initiative in specific situations, the leadership which they effectively exercise, like the leadership of other persons who hold no office, is primarily due to their own psychic and social competence. The essential characteristics in this connection would appear to be modesty and a pleasant manner, combined with positiveness of conviction and forcefulness in expressing it; a willingness to initiate action, tempered by tolerance and tact. In a community where a considerable portion of the population is illiterate, the effectiveness of a leader is also increased by his being able to read and write.

The *sub-delegado*, the former *sub-prefeito*, and the *fiscal*, who at present is acting as *sub-prefeito* until someone is named to the position, are perhaps the principal initiators of local action, partially by reason of the official positions which they hold, or have recently held, but more especially by reason of their individual abilities. Each is lit-

³²¹ See *Isolation and Contact*, p. 104.

erate. Each is noted for the vigor of his thought, speech, and action. Together with one of the storekeepers, they are perhaps the principal leaders of the community.

The storekeeper is a *cafuso*, 59 years of age. He is noted for his modesty, pleasant manner, shrewdness and "common sense," as well as his interest in the village and its welfare. His wit and humor add to his conversational ability and to his effectiveness in "getting along with others." He is considerate of those farmers and villagers who need credit to make purchases at the store until the new crop is harvested. His opinions are widely respected in the community.

The *sub-delegado* formerly was a farmer. He is 52 years of age, courteous, and modest. He has an active mind. His opinions are held with positive conviction and, on occasion, are clearly and forcefully expressed. In those relatively few cases in which he has had to act as the village peace officer, he has been firm but patient and considerate. He recently assumed the initiative in developing and carrying through plans to establish the local bus line. He is an effective political leader whose advice is sought and followed by many persons in the community. Greatly elated, after winning, recently, by an overwhelming vote, a spirited election, he exclaimed, "É-ê-ê! Did our horse run well! But I had this election right in my hand. Everybody trusts me. I'm a man of one word only,"²²² and they all know it."

The former *sub-prefeito* is a competent and industrious farmer, 46 years of age, whose initiative in establishing a mill, run by water power, has furnished his neighbors a ready and relatively cheap means of grinding their maize. His opinions are held with positive conviction and are always stated in a forceful manner. He is quite effective politically. The *fiscal*, who is at present acting as *sub-prefeito*, is 41 years of age. He is diligent in discharging the obligations of his office, pleasant in manner and tactful. He is noted for his conversational ability, especially in recounting tales. He is always neat in appearance and is probably the best-dressed man in the community. At the same time, he is a leader in both hunting and fishing activities. When someone is bitten by a poisonous snake or insect, he admin-

isters injections of serum. On occasion, he also sends the pharmacist in Boa Vista descriptions of the symptoms of someone who is ill and receives and administers the drugs which are prescribed.

Other men in the community contribute, to a lesser degree, in the formation and maintenance of public opinion. The tax collector is 60 years of age and a competent official. He is shrewd, pleasant in manner, and gets on well with other people. He is a leader in fishing activities. He is given to forceful speech and exercises considerable influence politically. The village registrar is 57 years of age, competent, reflective, quiet, and retiring. He is courteous and effectively disseminates his opinions by way of suggestion rather than of positive statement. Another villager, 62 years old, is noted for his shrewdness, dependability, and fund of practical knowledge. He is effective in developing public opinion. He is also a leader of fishing activities. The administrator of the *fazenda* which lies at the edge of the village also exercises a certain measure of influence. He is noted for the vigor of his thought, speech, and action. He assumes an active role at religious *festas* and always walks near the front in processions. He aspires to be a political leader. Some years ago, he was the *sub-delegado* in the village. He is ambitious and somewhat lacking in tact in disseminating his opinions, and these characteristics, together with the air of superiority which he tends to assume in the presence of his associates, are resented by many persons, and his effectiveness as a leader is thereby measurably decreased.

Perhaps four men exercise the principal leadership in hunting activities and four in fishing activities. In two cases, the men are the same in both groups. These two men are also included among the leaders mentioned above, as are the other two leaders of fishing activities. One of two other leaders of hunting activities is a young married man in the village and the other is a farmer.

By reason of his office, the present *padre* assumes leadership in carrying out the rituals of the *reza* and the Mass, as well as the rituals connected with religious *festas*, especially the processions, and the *romarias*. His youth and shyness, however, and lack of vigor in speech and action, reduce his effectiveness otherwise as a

²²² That is, constant and dependable.

leader, particularly in comparison with his predecessor.

As has been indicated, no *fazendeiro* lives at present in the community. Quite vivid in the memories of the local inhabitants, however, is the leadership of a *fazendeiro*, now deceased. In a prominent position on the wall of the building where village officials discharge their obligations, is a photograph of this former leader. It shows an elderly man, with a white beard and a bearing which suggests self-confidence and authority. He is spoken of with admiration. "He was absolutely fearless," said a village official. "A man of great courage! He thought nothing of setting out on the road, no matter what the hour, day or night, and alone at that. He was a great man and a powerful leader here in the village."

A few women exercise some degree of leadership in the community, their influence extending at times not only among their own sex but, to some extent at least, among the men as well. One is the school teacher who first came to the village 15 years ago as a young girl and some years later married a local man. As has been indicated, she is now completely assimilated and is an integral part of the community. She is affable and competent and regularly assumes a certain degree of initiative in the direction of the village school, as well as at religious *festas*. Young girls, especially from the less advantaged families, often come to her at the time of their weddings, to be dressed for the occasion and to receive advice on procedure. She is probably the most mobile woman in the village. Once a month she attends a meeting of teachers in the nearby town of Boa Vista and occasionally she visits her family in São Paulo. Although she has more schooling than any other local person, she is modest and unassuming. Her opinions, which are usually expressed with clarity, are listened to with considerable respect. The principal midwife in the community is 63 years old. She is energetic and forceful in speech and action. Called in at crises of childbirth, she assumes initiative, often giving instructions even to the man and head of the household. Especially if the life of either mother or child is imperiled, her advice is eagerly sought and attended to. She is famed for her success in effectively meeting several serious crises. She is also admired for her willingness to set out alone

on the road at any time, day or night, and in spite of rain and flood.

The wife of the *fiscal* who at present acts as *sub-prefeito*, is the daughter of a prominent farmer. She visits about the village as much as, if not more than, any other woman. Her contribution to the formation of opinion, especially among the women, is effective and continuous. She is well-liked for her modesty, sincerity, and pleasant manner. At the same time, she is straight-forward and forceful in expressing opinions. The wife of the administrator of the *fazenda* which lies at the edge of the village assumes initiative at religious ceremonies, especially at the *rezas* and in preparations for the processions. She is vigorous in thought, speech, and action. She is noted for her advice and other aid at time of illness. In association with her husband, she seeks to play a role in political activities which is not in keeping with local patterns of behavior and is severely censured on this point by a number of persons in the community. A somewhat overbearing manner in exercising initiative is also resented by many local residents, and consequently her influence on public opinion is limited. An elderly mulatto woman gets about the village a good deal and knows everyone and his affairs intimately. Her mind is alert and her speech forceful. She is frank, but also tactful, in stating opinions. She is admired and listened to by reason of her extensive fund of practical knowledge and "common sense." She definitely contributes to the formation and maintenance of public opinion, especially among the women. Among all those so far mentioned, both men and women, she alone is not literate.

A few other women exercise leadership in a more restricted way. One is a widow, 70 years of age, who annually arranges to have a *mastro* set up at her house, where she subsequently gives a *feita* for São João.³²³ An elderly Negro woman who lives on a farm about a mile from the village is often asked to assume initiative in "blessing," upon the occasion of illness, a person or domestic animal, employing prayers and certain gestures presumed to have magical power. She also acts at times as a midwife. Her competence, dependability, calm demeanor, and sage advice have earned her considerable respect and admiration.

³²³ See Religious Festas, p. 162.

SOCIAL CONTROL

The behavior of the individual ordinarily is under rather rigid and effective control. Prescribed conduct is clearly defined and rather generally accepted. At the same time, certain proscriptions upon a person's behavior are continually felt. The comparative absence, in this rural and relatively homogeneous society, of Alternatives of behavior with reference to which the developing child is forced to make a decision, makes the unfolding of his personality a relatively simple process.

Although control is rigid, it is seldom, if ever, felt to be onerous, since it is exercised subtly, by way of attitudes which are taken over in a spontaneous and largely unwitting fashion, early in the life of the child. His behavior comes, rather naturally and with a minimum of self-consciousness, to be channelized by the etiquette, ritual, and ceremony in which he participates; and by the dogma, myth, and legend which, in the course of time, come to form the major portion of his mental world almost as if they had been absorbed with the air he had breathed. The more conscious influence of public opinion, in the formation of which certain issues are debated, and of law with its formalized mechanisms of control, play a reduced role in both child and adult experience.

The mechanisms of social control thus are, with few exceptions, elementary in character. Rapport with parent, sibling, or other relative, play companion, spouse, or other friend, in which suggestion operates spontaneously and automatically, especially when reenforced by prestige, is perhaps the most powerful and effective of these mechanisms. "I never go out of the house alone with my *noivo*,"³²⁴ said a girl, whose relation with her mother is of intensely intimate character, and to whom her mother is a person of considerable prestige, "because my mother doesn't want me to."

Gossip is also an effective means of control in the community, although, because it is less spontaneous and unwitting, its action is less immediate than those of rapport, suggestion, and prestige. It obviously involves a heightening of self-consciousness and hence may lead to resentment and perhaps resistance, either passive or active, before

the individual, as usually occurs in the community, ultimately conforms. "What destroys one's peace of mind here," complained a villager, "is the 'they say that he says' (*diz-que-diz*). Someone starts to talk and soon everyone is talking. When you do something you shouldn't, you get it from all sides." "As soon as the slightest thing happens," remarked a young woman, "a chain forms. People begin to gossip here and there. By the time you know what's up, everyone is talking about you."

The effectiveness of these means of control is considerably increased by the circumstance that everyone knows personally everyone else. There is no anonymity in the village. No one can hide either himself or his acts. Virtually everything he does is soon known to all. The effectiveness of these means of control is also increased by the circumstance that the group is relatively small and consequently the normal curiosity of one person about another is not as easily surfeited as in an urban situation.

A woman, returning from another woman's house in the village, spoke to a neighbor's 5-year-old child who was playing in the street and then added a question regarding his play. The child ignored both greeting and question and inquired, "Why did you go see Nhá Chica (naming the person the woman had visited) today?" A school teacher who had recently been assigned to the village arrived at school, one day, a few minutes late. When, some days later, she refused the request of a village mother to let her children go home early, saying, "It's still schooltime," the mother inquired, "Was it not already schooltime the other day when you got here late?" The same teacher was also heard to remark that in other places where she had been stationed, she "could do more as she pleased." "I could even be absent and no one would say anything about it. But in this little village they know everything you do. If I'm a minute late, there will be several persons *de olho comprido*³²⁵ watching me."

As might be expected, the significant role of gossip in this society and the normal curiosity of one human being about the life of another give rise to what might be referred to as "specialists in gossip" whose function may be as significant, if not even more significant than that of other local

³²⁴ The man to whom she is engaged.

³²⁵ Literally, "with a long eye."

specialists, for example, the bell ringer, the horse-shoer, and the auctioneer of *prendas*. Of such a "specialist," a villager complained, "That woman seems to have nothing else to do except tell tales about other people." Of the same person, another villager remarked, "We call her 'the newspaper.'"

The role of propaganda as a mechanism of social control is quite reduced in the community. In politics and especially during election campaigns, its role is attempted, but the control which most often ensues is less due to the effectiveness of the propaganda itself than to the suggestion transmitted by way of rapport and the prestige of the man who disseminates it. Similarly, it is only on rare occasions that a local inhabitant is made aware of the existence of formal law. Where the mores are universally effective, law has little, or no, function and hence no necessity of existence. In fact, law usually emerges when the mores begin to break down. Legal prescriptions touch the life of local inhabitants almost exclusively in the form of taxation, in activities connected with the settlement of an estate or the drawing up and transfer of a deed, or the rituals of the civil marriage ceremony. If a person drinks *pinga* to excess, he may also find himself locked up for the night in the village jail. The action in this case, however, is taken at the order of the local *sub-delegado* who may be a relative or *compadre* or at least an acquaintance, and consequently the enforcement of the law in this case has a more informal, than formal, character, as is revealed in the ordinarily tolerant and sympathetic way in which the deviation from the norm is handled by the village official. "Sometimes I just send them home," he says, "and then I talk to them later. I tell them that that is no way for a man with a family, or the son of Nhô Brais, to act."

Even violent behavior, such as a heated quarrel or other serious form of conflict, is similarly treated. "This village gives one very little trouble," remarked the *soldado*, "*É como uma família só* (It's just like one big family). The *sub-delegado* has 53 *compadres* besides all his relatives, and whenever a dispute breaks out, the people here usually settle it among themselves."

Self-control, the most effective of all controls, is, as might be expected, highly developed in the community. Since there is comparatively little

uncertainty regarding the mores, the control which they exercise over the conduct of the individual is of powerful character. As soon as he has assumed the attitudes common to the community, he obviously comes to look upon his own behavior much as other persons look upon it. The external controls thus become internalized.

HUMOR

A characteristic trait of the local society and culture is humor. Rarely are the faces of the inhabitants set in serious lines, expressing pre-occupation or intense seriousness. The encounter of two or more persons at the home of a villager or farmer, in a street of the village, on the road, at a *venda*, or elsewhere, almost invariably evokes smiles on the part of all present and humorous remarks which, sooner or later, may result in laughter, the frequency and intensity of which will increase with the rapport which laughing always helps to evoke and nurture.

When a person joins a group that is conversing, he usually is welcomed with a jocular remark which symbolizes his acceptance by the others and his ready incorporation into the group. Reference may be made to some well-known characteristic of the person or to some event, recent or remote, in which he figured, the recalling of which evokes humor on the part of all present. On one occasion, for instance, a conversation group was joined by Seu Jaime, a villager who is universally respected and admired and who, occasionally, by preference, goes barefoot. As he approached, one of the men in the group turned toward him and said, "Look at the fellow! That miser! Let's all chip in and buy him a pair of shoes." "Yes," said another person who was present, referring to the fact that the economic condition of the man in question is above the average in the community, "Can it be that he hasn't piled up enough money to buy a pair of shoes?" After which he added, addressing himself to Seu Jaime, "We were just talking about the fact that a miser, the more he has the more he wants and the worse he lives."

This banter, taking its cue from the well-known habit of their friend, served to welcome him into the group and also to acquaint him, in a humorous way, with the subject under consideration. Since the man in question in no sense is considered a

miser and since his going barefoot is by reason of preference rather than necessity, no risk of offending him was assumed in the remarks.³²⁶

Joking, however, must be indulged in with care. "Sensitive feelings" must not be "hurt." In fact, "kidding" is relatively infrequent and, when it is indulged in, ordinarily is carried on with caution. Remarks are always accompanied by a smile or other evidence that humor, and not criticism, is involved.

It would seem that one of the characteristics which make a thing or an event humorous, is its incongruity or marked deviation from that which is commonly experienced. With hearty laughs and other expressions of merriment, an elderly woman remarked, "A man once said to a child, 'You must not eat any more oranges, my son,' and the child replied, 'But I want more oranges, my father.' So the father asked his child, 'Do you want to be like the man who ate so many oranges that he lost his hat under the rinds?'" Twice, amid explosive laughter, the woman repeated the remark: "And he lost his hat under the rinds."

The pun is often heard in conversation and almost invariably provokes a smile or a hearty laugh. It thus contributes effectively to reduce social distance, build up rapport, and reinforce solidarity. To a neighbor who had come in for a chat, a host courteously asked, "Would you like a *batida*?"³²⁷ Seu André?" "No," was the reply. "I'm already *abatido*."³²⁸ Everyone present laughed heartily. Then Seu André himself joined in the laughter.

Meanings may become inverted in a humorous situation so that the direct opposite of the thing or event in question is intended and understood. In fact, under such circumstances, it would seem that the humor itself consists in this inversion.

Chico was walking along the *Rua da Penha*, his head bent, as if in deep thought and Pedro was coming up the street toward him. As Pedro drew near, he stopped, put both hands on his hips and waited, a scowl on his face. External appearances thus indicated that a fight was about to take place.

As Chico came nearer, Pedro's expression became even more grim and forbidding. Suddenly, he feigned as if to draw a knife and shouted at Chico, "You dog, you! Do you think you can put fear into me by such a hard face? If there's anything to be settled between us, we'll clear it up right here and now!" "Get out of my way, you pile of filth!"³²⁹ Chico shouted, in an apparently angry tone of voice. "Throw away that knife before I make you swallow it!" And with this exchange, the two men rushed at each other and began to wrestle violently. In a few moments, however, each desisted from his exertions, put an arm on the other's shoulder and the two men walked back down the street, laughing and talking animatedly together. Several women and children in nearby houses, who had observed and obviously enjoyed the encounter, turned again to their work or play. "These crazy men," commented an elderly woman, laughing, "they're all like children!"

PROVERBS, EPIGRAMS, AND OTHER COMMON SAYINGS³³⁰

A considerable number of proverbs, epigrams, and other sayings are commonly employed in the conversation of local inhabitants. Among those heard being used were the following:

- A lot of water and few fish.
- He who has no dog, hunts with a cat.
- He is with his egg crosswise. ("He is 'in a bad humor'.")³³¹
- An old monkey doesn't step on a dead limb.
- Ripe fruit at the side of the road either has a worm in it or is sour.
- A son of a fish can be only a fish.
- It's there that the sow twists her tail. ("It's at this point that matters become complicated.")
- Rain doesn't break the bones.
- He wants to keep off the sun with a sieve. ("He's trying to hide what everybody knows about.")
- No one can suck sugarcane and whistle at the same time.
- In a closed mouth, flies do not enter. ("He who takes no chances, suffers no ill consequences.")
- The monkey that jumps around a lot is asking for lead. ("The person who meddles in the affairs of others, gets himself into trouble.")

³²⁶ It may also be true that the remarks served, in a large measure unconsciously, to express mild disapproval at deviant behavior (going without shoes on the part of an adult man).

³²⁷ A drink made of *pinga*, lemon juice, and water, shaken together (*batida*).

³²⁸ Dejected.

³²⁹ The Portuguese term employed was *porcaria*.

³³⁰ In translating these phrases, an effort has been made to preserve as much as possible the original style and expression. Words that rhyme have been retained.

³³¹ Explanations given by local inhabitants are cited between quotation marks.

There is no *sapo* (male toad) without his *sapa* (female toad).

He went to fetch wool and came back sheared.

I put my hand into an ant hill only when there are no ants in it.

It's a lot of bananas for a *vintem*.³³² (The effect is too great for the apparent cause. "He is doing me so many favors, I am suspicious of his intentions.")

A wolf doesn't eat a wolf.

When doubts come in, out goes love.

Friends are friends, but business is something else. The principal thing about a *negócio* (business transaction) is the secret.

It is better to have a friend in the *praça*³³³ than money in the box.

A lie in the mouth of the powerful is worth more than a hundred truths in the mouth of the weak.

Water and counsel are given only to those who ask.

In a fight between a husband and wife one does not intervene. ("Because after the quarrel is over and the husband and his wife have made up, the person who has intervened is at a disadvantage with both.")

An unmarried girl has an *alqueire* and a half of shame. When she marries, she loses a half *alqueire*. When she spends the first night with her husband, she loses another half *alqueire*; and when she has her first child, she loses the last half *alqueire* and has no more shame.

He's in the woods without a dog.

I have the day and the night which is the plenty that God gave me. ("I have the sky, the sun, the moon, the stars and so many other beautiful things that I am content.")

For love of the *santo* one kisses the altar. ("One does a favor for one person because of another.")

I know him from the tips of his fingernails to the roots of his hair.

One does not strike a woman, even with a flower.

A house without a woman is a body without a soul.

A young girl and *chita*³³⁴ are neither ugly nor *bonita* (pretty). ("It is of little importance whether or not the girl is pretty; to be young is sufficient. Just as with a dress; any one will do.")

I live laughing but it is to keep from weeping.

More love and less impertinence. ("Our relationship does not justify these familiarities.")

First the *obrigação* (obligation), then the *devoção* (worship). ("The necessities of life come first; then religion.")

Faith in God and a grapple on the world. ("One should have faith; but one should also wrestle with the world.")

It is well to go along with the priest but at a distance. ("The priest is a person you should respect since he is a representative of religion; at the same time, you should not keep too close to him, because an incident might occur and he might put a curse upon you.")

Look after your life because death is certain. ("Do not concern yourself with death, because it is certain; concern yourself rather with life, for it is uncertain.")

There is no remedy for death because it already is a remedy for everything.

An orange in the morning is like gold, in the afternoon like *prata* (silver) and at night *mata* (it kills).

Children *criados* (grown), troubles *dobrados* (doubled). ("Children when grown are more trouble than when they are small.")

The love of all of a father's children for their father is not as great as his love for them.

There is no Saturday without the sun, no Sunday without a Mass, No Monday without laziness. ("Monday follows a day off. Everyone is indisposed toward work, as also on a day after a *festa* or a holiday.")

A request made *sem dinheiro* (without money) is paid *no rio Pinheiro* (in the Pinheiros River).³³⁵

A woman is like an orange; you can find one anywhere.

At night all cats are dark-colored.

Fog on the *serra* (range of hills or mountains), rain *berra* (is bleating; that is, coming).

Pepper in another person's eyes does not burn.

When it is very small, you can twist the cucumber.

Sadness doesn't pay debts. ("It doesn't help to cultivate sadness because it doesn't solve any of the problems of life.")

Much *riso* (laughter), little *siso* (thought, judgment, sense).

He who sleeps at the barrel wakes up at the dipper. ("He who drinks [alcohol] at night is thirsty in the morning.")

An inheritance, the devil dances. ("Those who come into an inheritance are apt to spend it quickly.")

He who does not cry, does not suckle.

He who has a *boca* (mouth) goes to *Roma* (Rome).

When a man gets old, his sight decreases and his suspicions increase.

God writes straight with crooked lines. ("God's ways are often incomprehensible to man.")

³³⁵ Persons traveling from the community to São Paulo enter the metropolitan area through the former village of Pinheiros, near which flows the Pinheiros River. As has been indicated in the section on Isolation and Contact, it has long been customary for persons who traveled out of the community to receive requests from friends and relatives to purchase articles for them. The meaning here is that a paper on which a request has been written may be thrown in the river if the money for the purchase is not also furnished.

³³² An old Portuguese coin.

³³³ The market.

³³⁴ Cotton print cloth.

The order is rich and the friars are few. ("The benefits are great and there are few to share them.")

The outside door is the servant of the house.³³⁶

Let him who isn't dancing, carry the child.

One likes to take his *almoço* early better than his *jantar* late.

The truth you don't always tell.

One dances in keeping with the music. ("One accommodates himself to circumstances.")

For him who understands, half a word is enough.³³⁷

He who robs a thief has a hundred years of pardon.

He whom God *ajuda* (helps) is better off than he who *cedo madrugada* (gets up very early).

He paid for the slave and also for the pipe. ("He paid more than it was worth.")

He's a *caipira* who cuts on both sides. ("He's a shrewd *caipira*.)

The *caboclo's*³³⁸ book is a deck of cards.

He is full of fingers (confused, embarrassed).

The thing stank like a burnt horn.

That is a thing from the time of the *onça* (very ancient).

Marriage puts sense into a man.

To marry (*casar*) is not a dress coat (*casaca*) that one hangs on a peg. ("Marriage is a serious affair; you only marry once.")

The face does not hide what the heart feels.

To a *feita* or a baptism you do not go unless you are invited.³³⁹

The river runs to the sea. ("Money seeks the rich man.")

A bird doesn't forget its old nest.

He who sees only the face, does not see the heart.

With one grain after another, the hen fills her crop.

The best watch is the stomach.

Love is paid with love.

Water that has passed on doesn't turn the mill.

The obligation of him who owes is to pay.

Punishment sometimes delays, but it will not fail (to come).

Create *fama* (fame) and lie down in a *cama* (bed).

("After one has got a reputation, he doesn't have to exert himself. He can live on his reputation.")

In this world, he who walks least, flies. ("Everyone is taking as much advantage as he can of everyone else. You must be alert. You may think someone is a fool, but he may turn out to be an eagle [a 'sharp one'].")

For every fool who is born, there are a hundred "sharp ones."

Today, fools are born dead.

He who hits, forgets; but he who is hit, remembers.

Economy is the basis of filth. ("If you don't spend any money at all, you will live in want." Modification of the proverb "Economy is the basis of prosperity.")

The eye of the owner fattens his animals.

Necessity puts the rabbit on the jump.

The best seasoning is hunger.

A woman has as much strength in her tongue as an ox puts on the yoke.

Dirty clothes are washed at home.

Only the crawfish goes backwards.

Of the doctor and the *louco* (insane), everyone has *um pouco* (a little). ("Everyone knows some remedy for illness to suggest to others; he also, at certain times in his life, is not entirely sane.")

To God, nothing is impossible.

A rope always parts where the strands are weakest.

Using a pipe makes the mouth crooked.

He who knows everything, knows nothing.

Water doesn't run up hill.

Some people live to eat; others eat to live.

Training begins in the cradle.

If the horse is a gift, you don't look at its teeth.

Soft water that drops on a rock long enough bores right through it.

That which is prohibited is always the best.

The hen of your neighbor is always fatter.

Justice begins at home. ("When you have to judge, you should judge yourself.")

To speak is like silver; to keep silent is like gold.

He who waits, always obtains (what he desires).

The truth sometimes takes time but it always comes out.

A person who is not content with a little, will not be content with much.

The alterations were worse than the sonnet. ("The attempt to correct the error only aggravated it.")

There are evils which come for one's good.

There is no smoke without fire.

Far from the eyes, far from the heart.

Better late than never.

It is better to walk alone than in bad company.

It is better to prevent than to cure.

It is better to have too much than not enough.

He who cares, goes himself; he who does not care, sends someone else.

The walls have ears.

There is no mush on his tongue. ("He doesn't hesitate to tell you what he thinks about you, whether it be good or bad.")

The voice of the people is the voice of God.

From the thorn is born the rose. ("Everything that is good one gets by suffering. After a time of adversity comes a time of satisfaction.")

As in other parts of Brazil,³⁴⁰ a few sayings now current in the community reflect experiences and

³³⁶ A phrase used on the occasion of expelling a person from one's home.

³³⁷ So well-known is this proverb that only half the sentence is customarily employed: "For him who understands . . ."

³³⁸ A term with variant meanings in Brazil. In the sense in which it is used here, it is synonymous with *caipira*. (See *Caipira versus Cidadão*, p. 108.)

³³⁹ By "a *feita* or a baptism," is meant any festive event.

³⁴⁰ See, for instance, Pierson, 1942, p. 362.

attitudes of the slave era. They are employed more as interesting and humorous expressions handed down from a former time than as characterizations of living individuals. Among these expressions are the following:

- The Negro isn't born; he just appears.
- The Negro doesn't court; he *faz fosquinha*.³⁴¹
- The Negro doesn't pray; he mumbles.
- The Negro doesn't accompany a procession; he tags along behind.
- The Negro doesn't dance; he fights.
- The Negro doesn't dance; he jumps up and down.
- The bed of a Negro is a *girau*.³⁴²
- A Negro is *onça's* food.

SOCIAL CHANGE

By reason of the comparative isolation which has long been characteristic of the community, social change so far has been minimal. Since the solidification of the moral order during the early years of the colonial period, the limited number of ideas and attitudes brought in from the outside in most cases have come from neighboring communities where the society and culture are quite similar. Little strain for consistency has been injected into the local mores. Life has tended to go on much as it did in the past.

At the same time, physical isolation is breaking down. The community not only is effectively feeling the impingement of the metropolitan market of São Paulo, but also is beginning to feel the impact of ideas, attitudes, and sentiments characteristic of this urban center. It is therefore probable that in the not distant future the community will experience a rather decided alteration in the manner of its living and that the rate of change will progressively increase.

As has been indicated, changes have already occurred in the means of contact with the outside world. The appearance of the truck in the community for the first time some years ago,³⁴³ marked the beginning of a notable change in transportation. Produce could be moved in quantities much more rapidly and cheaply. The use of the *tropa de carga* (pack train) and the *carro de boi* (oxcart), which previously had been the principal means of transport, at once began to decline.

Today, the *tropas* have completely disappeared in the community and oxcarts are comparatively rare.

One of the consequences of this change was a shift in occupation on the part of several villagers who previously had been *tropeiros* (drivers of pack trains) or *carreiros* (drivers of oxcarts). One of these men is now a storekeeper. Another is a farmer and a third is a farm laborer. Two are deceased. Another consequence of this change was a certain improvement in the roads so that trucks could pass where, previously, only oxen, horses and burros had gone. Limited as was this improvement at first, it facilitated transportation and communication, not only by way of trucks but also by way of other means.

The first automobile seen in the village is vividly remembered by older inhabitants. A villager said:

It was around 30 years ago—I was only a boy then—when we saw our first automobile. It brought Washington Luiz.³⁴⁴ At that time, he was *prefeito* in São Paulo. He came in a *Fordinho de bigode*.³⁴⁵ I remember it well. Everybody ran out into the street. All gathered around and stood there, looking at the *Fordinho* as if they were in a daze, their mouths open and their eyes bugging out. I did the same thing; it was something very new for us. He took *café* there where the *botequim* is today. When he left, the *Fordinho* got stuck in the road and he had to get two horses to pull it out. He said to the men who helped him, "Take these few coppers and get yourselves a drink"; and then he gave them 12 *milreis*. The men certainly were pleased. In those days, 12 *milreis* were a lot of money.

Another villager added:

That automobile was a real success here. People were all excited. They had never seen anything like it.³⁴⁶

The inauguration of daily bus service through the village to the neighboring towns of Boa Vista and Piracema, which occurred while the community was under observation, in all probability will increase the rate of change, as has no previous event. Contact with these neighboring towns used to be much more difficult. Persons had walked the 11 and 7 miles, respectively, had gone on horse-

³⁴⁴ A former governor of the State and president of Brazil.

³⁴⁵ Literally, "the little Ford with a moustache," a term commonly employed in Brazil to refer to the Model T Ford. The fact that the two bars, mounted on the steering wheel to control the amount of gasoline supplied to the engine and to "advance" or "retard" the spark, were reminiscent of a moustache, gave rise to this expression.

³⁴⁶ There still are no automobiles owned in the community, however, with the exception of an old and imperfectly functioning car which is rarely used.

³⁴¹ Attracts attention to himself by way of grimaces and other antics.

³⁴² See Dwellings and Furnishings, p. 44.

³⁴³ See Transportation, p. 94.

back, in an oxcart or, in a few cases, in a *charrete*; or, in more recent years, had ridden, standing up, in some truck which was going in the direction they wanted to go. Contact with these towns, either directly by way of traveling on the bus itself or indirectly by seeking and talking to passengers who go through the village, or to relatives and friends who have returned from one of the towns, is now a daily occurrence. Each of the four times the bus passes through the village daily, as has been indicated elsewhere, is an event eagerly anticipated by villagers, bringing as it does a certain excitement into their lives not previously known. Curiosity about the outside world is stirred, especially in the minds of the young but to some extent also in the minds of older persons, especially of those women who have rarely been outside the local community. Since the establishment of the bus line, there has been a noticeable decrease in the number of persons seen on the roads on horseback and in *charretes*. Some persons have already sold their horses, since they are used rather for travel than for work in the field. As one man said, "It's so much easier to go by bus. When you get to town, you don't have to look for a place to put up your horse." Not only has travel on the part of men increased, but travel on the part of women has increased even more. "There were a lot of women and girls on the bus this morning," said, recently, one of the directors of the line. "Occasionally, the women take the early bus after they've prepared *armoço* for the men in the fields and they come back on the 2 o'clock bus in good time to get the evening meal." Messages and parcels are being much more readily sent and received than formerly.³⁴⁷

The regular passage of strangers through the village has heightened the self-consciousness of local inhabitants, a fact which is reflected in several physical changes in the village. One of the storekeepers has had a sidewalk of broken stone and cement laid outside his store. Another storekeeper has had his *venda* recalcimined and his name, together with the word *Casa* (commercial house), painted on the front. The third storekeeper, in front of whose *venda* the bus regularly stops, has had the building repaired and the out-

side recalcimined.³⁴⁸ The owner of the *botequim* has had the word *Botequim* painted near the front door where passengers on the bus who might care to take a glass of *pinga*, or other drink, during the few minutes spent in the village, can readily see it. The *fiscal* has had the *praça* cleared of grass and weeds and recently arranged for a road grader to come over from Boa Vista to improve village streets.

The painting of the word *Botequim* on one building and of the name of the store on another, were the first identifications of this kind to appear in the village, where streets have never needed a name plate, since everyone knows where everyone else lives. The appearance of these markers thus symbolizes the beginning of a shift from a condition in which relations were almost exclusively primary to one in which relations of a different character are beginning to appear. Obviously, a stranger who is passing through the village for the first time is not expected to know, as does every villager, where the *botequim* and the store of Seu Augusto are.

At the same time, local inhabitants are puzzled at the formality they observe in the attitude of these strangers. Contacts of other than a primary and informal character are too new to be understood. Strangers who do not give out information about themselves are resented. They are referred to as "*gente soberbo*" (haughty, proud people), "*gente sem educação*" (people without manners) and "*granfinos da cidade*" ("high-hats" from the city). "They seem to want to hold you a long way off as if they were afraid of getting themselves dirty,"³⁴⁹ a villager remarked.

Most local inhabitants merely remain silent, looking at the strangers and thinking about how different and incomprehensible they seem to be. The manner in which villagers circle the bus as it pulls up, however, and the expressions on their faces, leave little doubt about the dominant desire to approach these strange people and to establish contact with them. If, by chance, one of the strangers enters into conversation, he is soon asked, matter-of-factly, whence he came, what brought him to this part of the country, where he is going, if he is married and has a family, at

³⁴⁸ More recently, he has purchased a radio, the second in the village, for his store.

³⁴⁹ *Trata a gente de longe como se tivesse medo de suja.*

³⁴⁷ See *Isolation and Contact*, p. 103.

what does he work and other questions which help to "locate" him in terms of primary relations. Similar inquiries are always made of a person who moves to the community. If the newcomer is frank and open in his replies, the fact is soon known all over the village and wherever he goes he will sense a friendly and hospitable atmosphere. If, however, he is unaccustomed to such behavior and consequently unaware of the absolute necessity of establishing and maintaining primary contacts, and replies evasively or does not reply at all, considering the questions impertinent, he will soon be brought to realize that he is neither accepted nor wanted in the community.

Passengers from the outside who pass through on the bus add somewhat to the income of the community by paying for travel on a line which is owned locally and for such refreshment and other purchases as may be made while the bus is stopped briefly in the village. The owners of the bus line have been forced to have considerable work done on the road, travel on which by motor vehicle previously was precarious in many places, especially on the steeper slopes, immediately following a rain. This improvement of the roads, together with the inauguration of regular bus service, not only to carry passengers but also milk and other farm produce, is expected to increase land values along the way.

The setting up a few years ago of a motor, driven by water power, on the *fazenda* at the edge of the village, and the consequent lighting of the church and two houses with electricity added to the material convenience of local inhabitants. The radio which was recently introduced brought São Paulo into daily contact with at least a few villagers. The airplanes which in the last few years have flown regularly over the region remind local inhabitants of life in other places.³⁵⁰ The new means of communication are stimulating

curiosity, especially in the younger generation, curiosity regarding the outside world, as revealed in the way, for instance, children watch an airplane flying overhead or stand around looking at the passengers on the bus. It is also stimulating a desire to see and to know the world that lies outside the community.

During the period in which the community was under observation, a cinema was set up by the administrator of the *fazenda* which lies at the edge of the village. An old building near one of the *vendas* was utilized and a wire run from the generator driven by water power on the *fazenda*. The period of operation of the cinema, however, was brief. The expense, in relation to the financial return was too great. Old "silent" pictures, with English subtitles, including travelogues, "westerns" and comics, were shown on Saturday and Sunday evenings. During the brief period the cinema functioned, however, the number of dances, which are occasionally held on Saturday evening, declined and those held were briefer than formerly, since they began only after the termination of the cinema performance. Bits of information obtained from the showing of these pictures began occasionally to appear in the conversation of local residents, indicating that mental horizons were being enlarged to some extent.

Although the plow was introduced into the area perhaps early in the present century, the hoe, as has been indicated, is still the principal agricultural tool. Commercial fertilizer has been known in the community for several years, but is little used, as also are sprays and insecticides. The *monjolo* has now almost entirely been substituted by the two mills for grinding maize.³⁵¹

To a considerable extent, the former self-sufficiency of the farms has given way to a condition in which the planting of one or more money crops, like onions, potatoes, or beans, determined by the needs of the outside market and the estimate of the farmer as to which crop will bring the best price, is becoming the dominant interest of farmers. "It used to be," said a local resident, "that a man planted a bit of everything and the little the family didn't use was exchanged for the few things that couldn't be raised, like salt and cloth. But that time is passing." A few farms, however, still are largely self-sufficient. One of

³⁵⁰ The use in the community of a jeep on the part of research personnel engaged in this study attracted widespread interest, as also did the use of a Coleman pressure lantern. As has been indicated, two of the storekeepers, the owner of the principal *botequim* and the owner of the bakery subsequently purchased Coleman lanterns for their places of business. The buildings were then kept open longer in the evening, thereby lengthening the conversations of frequenters of these establishments, and especially of the groups of conversation that form nightly (see *Conversation Groups*, p. 112). The light which was flung out into the street by the lanterns, extending much farther than the light of the kerosene lamps previously used, gave to the village, in the evening, a brightness and attractiveness not known before.

³⁵¹ See *Grinding Maize*, p. 86.

these has been described.³⁵² Of another, a villager said, "The farm of *compadre* Henrique is very well set up. He buys almost nothing but salt and the clothes for his family. Everything else he takes out of the ground." The former system of bartering products "always carried on with honesty where everybody knew the value of the things they traded," as one man put it, has now largely been substituted by a system in which transactions carried on with the owners of trucks who come into the region to take farm produce to the urban market and who, as another man put it, "are accustomed to the complex, if not to say, dishonest business practices of the city," figure prominently. "It used to be we hardly ever saw money," recalls a villager. "We traded what we had left over with someone who needed it for something he had too much of and we needed." The principal vestiges of the old system are the liquidation of a farmer's debt, contracted at a village store, by means of a delivery of onions, beans, potatoes, or other produce; and the exchange of maize, at the two mills, for maize flour.

These changes in the techniques of the community, however, have set the stage for social change rather than constituted it. At the same time, the old mores are beginning to be, at least to some extent, under strain, as is borne out by remarks occasionally heard. A storekeeper, for example, recently said, rather exaggeratedly, "A man of his word no longer exists." Another villager complained, also rather exaggeratedly, "There is no longer any respect for parents; you hear children saying '*você*' to their father."³⁵³ "This thing of a woman giving the orders in the house," remarked another villager, referring to a local woman who tends to assume a role not ordinarily accruing to her sex, "of taking the place of the rooster in the yard, is something new."

Farmers complain that the men they hire to work on their farms today do not always care to work as hard as men did in the past. "Twenty years ago," a farmer remarked, "everyone was a hard worker; but today, they're not as good as they used to be." This criticism extends also to the young women. "These girls today aren't any

good," said, rather exaggeratedly, a woman in the village. "There was one in to help me after my last childbirth. She came from a farm near here. She didn't like to work; she wanted to lie in bed until 9 o'clock in the morning and then sleep some more during the day. All she cared about was having a good time. It's too bad these girls are that way. What can they gain by it?"

The younger women are beginning to react, perhaps in large part unconsciously, against the restraints upon their sex. Any alteration in behavior, however, still comes under immediate reproach and ridicule. At a recent dance, three girls remained in the center of the floor conversing with their partners after the music had stopped, an act which is not in keeping with the former custom. A man was heard to remark, "Look at that! Women are losing all sense of shame." When one of the girls suggested discreetly "that there be a *privilegio*,"³⁵⁴ a man remarked, "These women are getting to be so forward no one can stand it any more." When a girl and a boy went outside the house in which the dance was being held to walk in the street, where other young people also were walking, although the sexes remained separated, a man was heard to remark, "When did anyone in the olden time see a girl go out like that, at night, with a boy?" "*Quá!* the world is lost," replied his companion, with a show of disgust. Knowledge regarding sexual behavior apparently is becoming somewhat more extensive among young women and girls than formerly. "Girls today know things that a married woman never used to hear," remarked a midwife. "Sometimes a little girl will say something that makes you want to turn your face away and never look at her again. But she is merely repeating what she's heard someone else say."

Politics probably occupies a smaller portion of the thought and activity of the men and a slightly larger portion of the thought and activity of the women than formerly was the case. As has been indicated,³⁵⁵ the attitudes and sentiments related to religious behavior and to belief in such phenomena as the *almas* and the *assombrações*, as well as folk treatment of disease, are beginning to change, especially among the men.

³⁵² See Agriculture, p. 63.

³⁵³ *Você*, it will be recalled, is the familiar term used either between equals of great intimacy or in addressing persons of inferior status.

³⁵⁴ A brief reversal of the usual roles of men and women at a dance so that the woman invites the man.

³⁵⁵ See Skepticism, p. 182.

SOCIAL DISORGANIZATION

Evidences of social disorganization scarcely exist in the community. The population is relatively homogeneous and stable. Mobility is minimal and limited largely to movement out of the community rather than into it, so that the local organization suffers little disturbance from without. The society is based largely on relations of kinship and *compadrio*³⁵⁶ and is tenacious and resistant. The mores are relatively uniform and are crystallized into patterns generally known and accepted, so that they direct almost automatically the habits of the individual. There is little movement from one status or role to another. Contacts are almost exclusively primary and individuals encounter each other at virtually all points in their lives. To a considerable extent, experiences are common and shared, so that attitudes, ideas, and sentiments, and the mental worlds into which they enter, vary little throughout the community. Institutions are homogeneous and hence support and reenforce each other. Under these circumstances, a minimum of social disorganization is to be expected.

Since the individual and society, as Charles H. Cooley pointed out many years ago, are like the two sides of the same coin, each an integral and indispensable part of the other, it is axiomatic that social disorganization is always accompanied, as both a product and a condition, by personal disorganization. Among the indices of both of these phenomena are crime, juvenile delinquency, divorce, desertion, destitution, insanity (insofar as it is due to social, rather than biological, circumstances), and suicide. In the local community, these indications of disintegration are virtually absent.

Juvenile delinquency is unknown. Such phenomena as vagrancy, theft, robbery, the defacement, looting or destruction of property, prostitution and gang behavior, on the part of children or adolescents, do not exist in any form. In the last two decades, crime has been limited to two incidents. One was the attempted rape, about 2 years ago, of a feeble-minded girl on the part of a young man who was immediately taken in hand by his father and other members of the family in such a way that relations between the two families

involved were strengthened, rather than strained or broken, by the incident. Twelve years ago, two men were shot and killed in a drunken brawl in a village store, the culmination of a heated argument in which the killer believed his personal worth to be impugned. The killing was unpremeditated. Although the man was sentenced to 28 years in the State penitentiary, and the act of killing was universally condemned, the fact that he defended his personal worth was in accordance with, rather than in contradiction to, the local mores, and consequently it in no way evidences social disorganization.

No one locks the doors when he leaves the house unless all the members of the family are to be away for a considerable period of time, when the house, especially if it be on a farm, will be closed tightly against the possibility that some vagrant from outside the community, who may be passing through, will enter and pilfer. Tools and other property are left with safety from one year to the next in sheds without doors or scattered about the farm or village yard. Chickens, ducks, goats and other domestic animals wander about the village at will, without danger of theft. "No one around here steals anything," remarked a villager. "My neighbor has a granary right there facing the street where he leaves onions, maize, and other things. Anyone could go there at night with a sack and help himself. But nobody takes anything. On the farms around here, people leave their beans, potatoes, maize, onions and other things piled up in the field and no one bothers them." "If a person does something he shouldn't do," said the *sub-delegado*, "I usually just talk to him a little; but if he were a thief, and I had my way about it, I'd kill him. We can't have thieves around." Inhabitants have no memory of any robbery, either with or without a gun, having been committed in the community.

A small room in the building where village officials discharge their obligations is reserved for the *sub-delegado* to talk to infractors of the law, and two other small rooms, with wooden bars at the doors and windows, are used as the village jail. The latter has been occupied, however, within the memory of villagers, only by an occasional man who has partaken too freely of *pinga*, or other alcoholic drink, become disorderly, and been lodged in a cell until again sober. "Sometimes," says

³⁵⁶ See *Compadrio*, p. 142.

the *sub-delegado*, "a man drinks a little too much and then he may strike another man or shove him around a bit. So I tell the *sordado* to put him in the jail. But if he has a wife and children, I have him brought to me as soon as he's sober and I say to him, 'Now this is not right! You ought not to do things like that! You should do thus and so,' and then I send him home."

There is no organized prostitution. Although a married woman and two widows are known to receive the attentions of men for pay, they are in no sense outcasts in the community. The other women treat and speak to them with tolerance, except in the event a husband becomes emotionally involved.

Divorce does not exist in Brazil, a proscription which is supported in the local mores. "Marriage is for life," a village woman remarked, "and one should stick to it, come what may." Desertion rarely occurs. No man is known to have deserted his wife and family.³⁵⁷ During recent years three local women, none of whom now lives in the community, have left their husbands. The husband of one is feeble-minded. The second woman left her husband and small child and went away with another man. "She put her face out into the world and we never heard from her again," says the mother of the husband, who took the child to rear. The third woman is said "to have been false to her husband. When he objected to her conduct, she left."

Poverty is extensive; but destitution is always avoided by the sharing, on the part of relatives, friends, and neighbors, of their means of subsistence, even though meager, with the especially unfortunate.

There is one actual case of insanity in the village and two other persons are referred to by villagers as "insane." In each case, however, the abnormality appears to be due rather to biological than to social circumstances. The person who is insane is a woman, 35 years old, who lives with her 72-year-old mother, a feeble-minded brother of 51 years, and the latter's 17-year-old son. She has been insane, it is said, since birth. She occasionally appears at the door of the house or is seen through a window, walking back and

forth or in a circle, and suddenly raising her arm over her head, distorting her features, and crying out in unintelligible sounds. The two daughters of one of the village storekeepers, aged 35 and 14 years, respectively, are referred to in the village as *loucas* (insane) but appear rather to be feeble-minded, as well as epileptic.

Four suicides are remembered by present residents in the village. About 30 years ago, a man was found one morning hanging in a tree. A villager recalls the event vividly:

That day the fellow had gone to Boa Vista on foot. It was dark by the time he got back. As he was coming along the road, he saw two black things there jumping around in front of him. He couldn't make out what they were. He kicked at them and he yelled, "Get away from here! Don't bother me!" Finally, he got back to the village and went to the house of his cousin to spend the night. After he had gone to bed, someone heard him call out, "Go away! Quit bothering me!" When, a little later, they heard him say again, "Go away! Quit bothering me!" they got up and went to the room where he was sleeping to see what was wrong, and he said, "There's some kind of an animal that keeps bothering me." They looked around everywhere but found nothing, and finally they went back to bed. A little later, they heard him call out, "Let's go! Let's go!" Several hours later, someone heard him get up and go outside the house and the next morning they found him hanging from the limb of a tree.

About 25 years ago, a man hanged himself in a house at the edge of the village. He was a Negro, new to the community and alone, without family.³⁵⁸ About 6 years ago, a farmer, who drank heavily and who had turned Protestant, then again Catholic, hanged himself at his home several miles from the village. More recently, a young man, 28 years old, married and the father of three small children, following a scuffle with a friend in which he had accidentally cut the friend's hand and had been severely reprimanded in public for his carelessness by his father, a village leader, took his life by drinking insecticide.

The usual difficulty in determining the chain of circumstances which, in a given case, lead to suicide, is obviously increased in these cases, where the only knowledge of the circumstances involved is to be obtained from the memories of persons who are not given to the precise registering of events.

³⁵⁷ A young man who some years ago was forced to marry an unmarried mother of whose child he denied being the father, never lived with his wife.

³⁵⁸ Some time later, a villager made a *promessa* that "if things would get better" for him, he would put up a cross at the side of the road near this house as an aid to the unshriven *alma* (see Almas and the Santa Cruz, p. 169) of the suicide. The cross is still standing.

One of the suicides, however, was that of a man who had recently come to the village and hardly had begun to participate in the local society. It is not likely therefore that the disintegration of his personality which resulted in the taking of his life reflects social disorganization in the local community. In the case of the man who is reported to have had hallucinations, it is probable that at least some measure of insanity was involved, which may or may not have arisen out of social circumstances. One of the other men was a brother of the daughters of the storekeeper, mentioned above, whom villagers consider to be "queer," and his suicide may thus have been due more to biological than to social circumstances. The excessive use of alcoholic drink, on the part of the last of these four men, as well as his vacillation in allegiance to contending sects, may perhaps indicate mental disturbance which was due, at least in part, to social circumstances. The degree of social disorganization which is reflected in these

cases, however, especially when one also takes into consideration the fact that these are the only cases of suicide within the memory of local residents, would seem not to be very great.

The beginnings of disintegration, in the case of certain patterns of religious behavior, as revealed in the decline of participation in the *romarias*, in absence from Mass, confession, and communion, and in the development of a limited amount of skepticism with reference to Catholic belief, such phenomena as the *almas* and *assombrações* and the folk treatment of disease, indicate a certain amount of loosening of the controls over the behavior of the individual. The extent of this change, however, in comparison with the total round of local belief, is relatively negligible. In general, the local society is strong and vigorous and, as the comparative absence of indices of personal disorganization indicates, no measurable degree of social disorganization exists.

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GLOSSARY

Included in the following list are Portuguese terms used in the text, with the exception of those employed only once or twice and defined at the time. The meanings given are in keeping with the usage in the local community and, in some cases, vary from meanings elsewhere.

Abraço, an embrace which may immediately be repeated once, twice, or more times and be accompanied by vigorous pats on the back.

Administrador (de fazenda), an overseer of a *fazenda*.
Aldeia, (1) a village of tribal Indians; (2) a village of Indians settled by the Government or at the initiative of ecclesiastical authorities (colonial era).

Almas (armas), the souls of the dead which, under certain circumstances, are thought to return and wander about the world and, sometimes, to disturb, inconvenience, perhaps harm the living.

Almoço (armoço), the first substantial meal of the day, taken sometime during the morning, usually between 9 and 11 a. m.

Alqueire, (1) a unit of measurement, equivalent (in the State of São Paulo) to 2.42 hectares or 5.9774 acres; (2) a unit of capacity, equivalent to 50 liters.

Andor, the platform on which an image is carried in a procession.

Arapuca, a trap for catching birds, made of *taquara* (pl. 20, a-c).

Araticum, a wild fruit, from the tree, *Annona* sp.

Arroba, a measurement of weight, equivalent to 15 kgm.

Assombração (plural, assombrações), a "visitation" of a ghostly being.

Bagre, a species of fish of the same family as the catfish.

Bandeira, (1) flag; (2) a cloth attached to a *mastro*, and bearing an impression of the image of a saint; (3) a group, consisting of one or more *bandeirantes* and their retainers, servants and slaves.

Bandeirantes, hardy adventurers, usually of Portuguese or Indian-Portuguese origin who, in the sixteenth and seventeenth centuries, setting out from the region around São Paulo, explored, and to some extent exploited, large areas in the central portion of the South American Continent.

Barraquinha, a crude shelter under which a counter is set up for selling food or drink at a *feira*.

Benzedor (fem., benzedeira), one who seeks to heal by "blessing"; that is, by employing magical formulas.

Berne, the larvae of the fly called *berneira*, *Dermatobia hominis*.

Bolo, cake.

Botequim (plural, botequins), a shop where alcoholic and a few "soft" drinks, usually for consumption on the premises, are the principal items sold.

Branco (fem., branca), literally *white*; a term used to refer to individuals who are of unmixed, or relatively unmixed, European origin or have acquired status commensurate with that of the whites.

Bucha de terra, (1) a fibrous growth produced by a plant related to the gourd, *Luffa cylindrica*; (2) the plant itself.

Café, (1) coffee made by roasting the coffee bean together with sugar, and grinding to a fine powder, subsequent to which boiling water is added and the liquid strained through a cloth; usually taken quite sweet; (2) the first meal of the day.

Cafézinho, one or more servings of *café* offered to a visitor, in keeping with prescribed rules of etiquette (also referred to as *café*).

Cafuso (fem., cafusa), a mixed-blood of Indian and African descent.

Caieira, a pile of wood, covered with earth and fired to make charcoal (pl. 8, c).

Caipira, (1) a rural inhabitant of the plateau area of the State of São Paulo; (2) a person living anywhere in Brazil outside the larger cities; (3) a person living in the city whose behavior recalls characteristics usually associated with rural inhabitants.

Capelão (plural, capelães), a layman who, on request, directs a religious ceremony at a private home, a wayside cross or chapel, or at a cemetery, repeating and chanting prayers.

Capitão-mór, the commander in chief of the militia of a city (colonial era).

Capivara, a large rodent, *Hydrochoerus hydrochaeris*.

Cará, a plant (*Dioscorea* spp.) with edible tubers.

Caraguatá, a plant, *Bromelia antiacantha*, the root of which is used for food.

Carroça, a two-wheeled cart, with shafts, used for transporting farm produce and similar items.

Cavaquinho, a small viola.

Cedro, a species of cedar, *Cedrela glaziovii*.

Centavo, a hundredth part of a *cruzeiro*.

Charrete, a two-wheeled cart, with shafts, used for transporting persons and, occasionally, light articles.

Churrasco, a barbecue (pl. 19, e).

Cidadão, literally, *citizen*; a term employed in the local community with its original meaning: an inhabitant of the city.

Cipó, local term, of Guaraní origin, for vine; more commonly used to refer to several species of vines used as cord or rope.

- Comadre**, literally, *co-mother*; the godmother of one's child, or the mother of one's godchild.
- Compadre**, literally, *co-father*; the godfather of one's child, or the father of one's godchild.
- Compadrio**, a system of relationships involving godchildren, godparents, and the natural parents of the godchildren.
- Couve**, a species of cabbage.
- Credo!**, an exclamation, consisting of a shortened form of the Apostle's Creed, used when one speaks or thinks of that which might harm him and against which he desires protection.
- Cruzeiro**, the unit of exchange in Brazil, equivalent, at the present official rate of exchange, to 5.45 cents (U. S.).
- Curandeiro**, a healer who employs herbs, magical formulas, and (sometimes) patent medicine.
- De cócoras**, a term used to refer to the local manner of squatting when resting, or when working at some task on the ground (pl. 20, *a*).
- Delegado**, law-enforcement officer of the *município*.
- Desconfiado**, a term used to describe an attitude of reserve, especially toward strangers, which reflects a lack of experience and of self-confidence, and apprehension regarding possible slights or harm.
- Distrito** (de paz), the administrative subdivision of a *município*, consisting of a *vila* (a population nucleus smaller than the seat of the *município*) and its surrounding territory. There are as many *distritos* in a *município* as there are *vilas*, each named for the respective *vila*.
- Encomenda**, (1) a request to deliver, or bring, to the person asking, a message, letter or parcel; (2) an object so requested.
- Engenho**, (1) a simple press for squeezing out cane juice, with either iron or wooden cogs (pl. 15, *a, b*); (2) a larger mill for crushing cane to make *pinga*.
- Enxada**, a tool similar to the hoe, except that the blade is narrower and longer (fig. 8, *d*).
- Escrivão**, an official of the *distrito* who records deeds and vital statistics and also assists with the civil marriage ceremony.
- Evangelista**, a term employed by local inhabitants to refer to a member of any Protestant sect.
- Faca de bainha**, a knife, with a slender blade, carried in a sheath.
- Facão**, local type of machete (fig. 11).
- Farofa**, toasted maize or manioc meal, stirred into melted fat.
- Fazenda**, a large farm which may be supervised, but is not worked by the owner himself.
- Fazendeiro**, the owner of a *fazenda*.
- Festeiro**, a person who helps prepare, and assumes part of the financial obligations for, a festival.
- Fiscal** (*da prefeitura*), an official who collects fees and similar levies.
- Foice**, a tool, with a curved blade and long handle, used for cutting brush and trimming trees (fig. 8, *e*).
- Fubá**, coarse maize meal.
- Garapa**, the juice of freshly crushed sugarcane.
- Garrucha**, a breech-loading, double-barreled pistol.
- Guaraná**, a soft drink, made from carbonated water and the seeds of the *guaraná*, a native plant, *Paullinia cupana*.
- Içá**, the female of the *saúva* ant at the flying stage of development, when the abdomen is heavy with eggs; used locally for food.
- Jacá**, a large, rectangular basket, with rounded corners, made of *taquara*, and used to transport articles on the back of a horse, mule or burro and, sometimes, a man.
- Jaboticába**, a fruit, from the tree, *Myrciaria* sp.
- Jantar**, the evening meal, usually taken sometime between 4:30 and 6:30 p. m.
- Juiz de paz**, justice of the peace, an official of the *distrito* who resolves small disputes and presides at the civil marriage ceremony.
- Lambari**, a species of fish (*Tetragonopterus*).
- Lamparina**, a crude lamp, made of a small bottle, or tin receptacle, and supplied with kerosene, a metal cap and a wick.
- Leiloeiro** (*de prendas*), an auctioneer who auctions *prendas*.
- Lenha**, firewood.
- Lima**, a fruit, from the tree, *Citrus medica*; not the lime.
- Madrinha**, godmother.
- Mameluco** (fem., *mameluca*), a mixed-blood of Indian and European descent.
- Mancebia**, a system of conjugal unions outside marriage in which there is some degree of permanence.
- Massapé**, a dark, rich, porous soil of considerable depth.
- Mastro**, a long pole, set upright in the ground, sometimes painted in vivid colors, to the upper end of which is attached a *bandeira* (flag) to honor a given *santo* (pl. 16, *a*).
- Mata**, a forested area, heavily covered with vines and underbrush so that passage is extremely difficult.
- Mato**, (1) woods; (2) a wild, uninhabited area; (3) a rural region; (4) weeds.
- Mecê** (plural, *mecês*), a simplification of *vosmecê*, which in turn is a simplification of *vossemecê* and *Vossa Mercê* (Your Grace).
- Milreis**, the former medium of exchange in Brazil which, in 1942, was substituted by the *cruzeiro*, with the same value. As implied by the name, it was 1,000 *reis*.
- Monjolo**, a large mortar and pestle, operated by water power (fig. 12).
- Município**, an administrative subdivision of the state, consisting of a *cidade* (a town, of varying size), together with the immediately surrounding territory. The *cidade* has no corporate existence apart from the *município*.
- Mutirão**, the custom of neighboring farmers getting together to help one another with some activity, such as the planting, hoeing, or harvesting of a field, or the building of a house or other shelter.
- Nhô** (fem., *Nhá*), a term of respect, used with the given name of a person; a heritage of the slave epoch when the master was known as *Sinhô* (from *Senhor*, *master*) and the mistress as *Sinhá* (from *Senhora*, *mistress*).
- Olaria**, a small establishment for making brick (pl. 8, *d*).
- Onça**, a species of wild animal, *Panthera onça*.

Oratório, a small, crudely built household shrine, in which small images are kept.

Paca, a rodent, *Cuniculus paca*.

Padre, priest.

Padrinho, godfather.

Paiol, a crib for storing farm produce (pl. 20, e).

Pardo (fem., parda), a term loosely employed in Brazil to refer to variations of color (and, to some extent, of race) intermediate between *branco* (white) and *preto* (black).

Pau a pique, literally, *sticks on end*; (1) a type of house construction in which puddled earth is spread over a framework of sticks; (2) an alcoholic drink.

Peneira, a sieve, usually made of *taquara*.

Peroba, a native hardwood, *Aspidosperma* sp.

Picador, a pit in which clay is mixed for making brick.

Picuá, a cloth sack used for carrying small objects while traveling on horseback or on foot (see pl. 2, f).

Pilão, a wooden mortar, made by hollowing out a log (fig. 7).

Pinga, the regional slang term for *aguardente*, an alcoholic drink made by fermenting the juice of the sugarcane.

Pipa, (1) a wooden container in which clay is stirred with paddles, by means of animal power, during the process of making brick; (2) a cask, usually employed for alcoholic liquors.

Planalto, the high plateau which extends over the major portion of the Brazilian interior from near the seacoast to the Paraná and northward to the Amazon Basin.

Podãozinho, a tool, similar to the *foice*, except that it is smaller.

Poiá, a crude stove (fig. 5).

Praça, (1) a public square; (2) a market, or marketing center; (3) the principal nucleus of business houses in a town; (4) a cleared space near fallen timber, on which a *caieira* is built.

Prefeito, the principal administrative officer of the *município*.

Prenda, an object donated by a parishioner to be auctioned off at a festival to help pay expenses.

Preto (fem., preta), literally *black*; a term used to refer to persons of unmixed, or relatively unmixed, African ancestry.

Promessa, a vow, made to a *santo*, to perform a specified act in return for the granting of a given request.

Quentão, an alcoholic drink, made by adding approximately half as much water to a given quantity of *pinga*, and boiling with sugar and a little ginger and cinnamon.

Rancho, a crude shelter for farm produce and similar items, usually located in a field and consisting of a roof of *sapé*, supported on poles.

Rapadura, crude brown sugar, in the form of cakes.

Reboque, a plaster, made of lime, earth and water.

Réstia, two parallel rows of onions braided together so as to be handled easily.

Reza (1) a meeting, for prayer and the singing of hymns, held in the village church, at which the *padre* usually

officiates; (2) a gathering at a wayside chapel or in a private home, at which one of more *capelães* repeat and chant prayers.

Riscador, a diminutive lister, used to open shallow furrows for planting (fig. 9).

Roça, a cultivated patch or field.

Romaria, a group pilgrimage made to a famed shrine.

Rua, street.

Sacé, a mythical being, said to have the form of a small, black boy with one leg, to wear a red cap and to be especially mischievous, fond of playing pranks.

Samba, a folk dance, employing the *samba* rhythm, which differs considerably from the sophisticated variety known to the cities.

Santo, roughly *saint*; the precise content of the term, however, varies somewhat (see section on *Santos*, p. 147).

Sapé, a coarse grass, *Imperata brasiliensis*, used for thatching.

Saúva, a species of ant (*Atta sexdens*).

Sede, (1) a seat or headquarters; (2) the central group of building on a *fazenda*.

Seu, an abbreviation of *Senhor* (Mister).

Sítio, a small farm, worked by the owner (or renter) and his family.

Soldado, a member of the military police, assigned to the village by the State authorities to assist the *sub-delegado* in maintaining order.

Sub-delegado, the law enforcement officer of the *distrito*, under orders of the *delegado*, stationed in the seat of the *município*.

Sub-prefeito, the principal administrative officer of the *distrito*, named by, and directly responsible to, the *prefeito*.

Taipa, tamped earth.

Taquara, a native species of bamboo.

Tarefa, a unit of measurement, equivalent to one thirty-second of an *alqueire*.

Terreiro, the space around a farmhouse which is kept clear of vegetation.

Tipití (*tapití*), a small, flexible, oval-shaped basket, made of *sapé* and used locally for expelling liquid from a mass of crushed fruit, especially citron.

Tropa, (1) a pack train; (2) a band of loose horses, mules, or burros being driven along the road.

Tropeiro, the driver of a *tropa*.

Tucum, the fiber from the *tucumã* palm, used locally for weaving fishlines and nets.

Valo, a deep ditch, used as a boundary between properties pl. 11, i).

Venda, a store in which a variety of wares are sold, including alcoholic drinks.

Violão, a musical instrument, of six strings, similar to the guitar.

Virada, the sharing of a common glass of *pinga*, or other drink, on the part of all persons present.

Virado de feijão, boiled beans, recooked with manioc or maize meal and lard, and seasoned with onions.

Xuxu, a vegetable, *Secchium edule*.

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- Sugarcane, 8, 61, 67, 89, 90, 111, 161, 210.
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- Tucum* fiber, 33, 34, 36, 81–82, 223.
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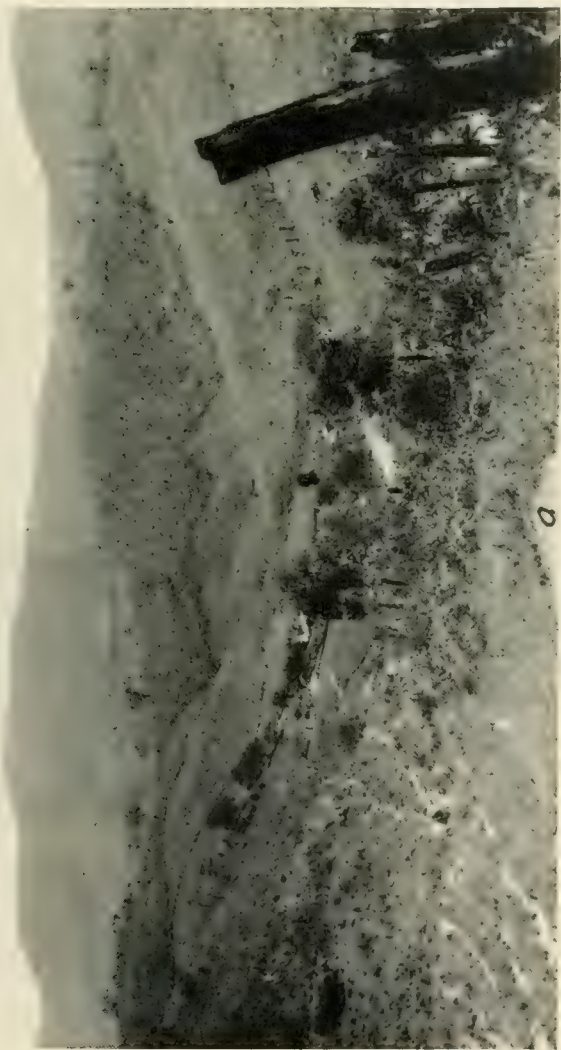
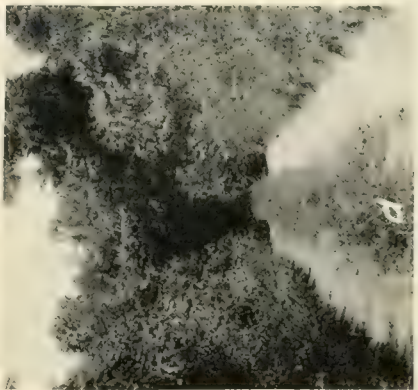
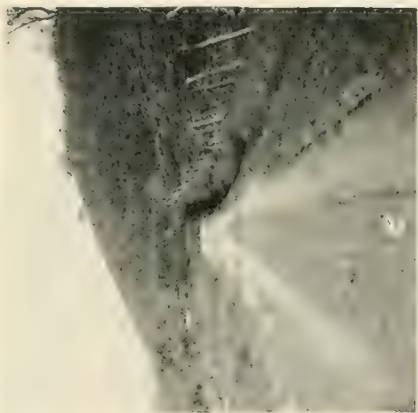
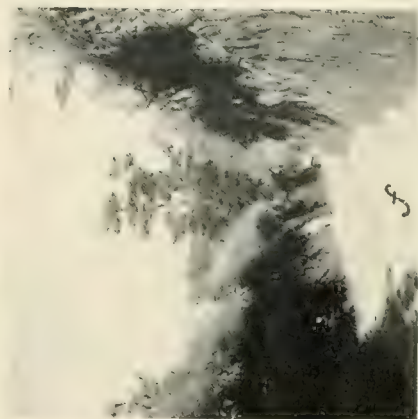


PLATE 1. **Landscapes, roads, and paths.** *a*, Landscape, showing pasture, timber, and fields; farmstead and road in valley. *b*, Tieté River and surrounding hills. *c*, Roads dividing to reach different farm homes. *d*, Road to Paratinga. *e*, Better road than shown in *d*. *f*, Roadbed cut down by use and erosion. *g*, Path out to the fields.



PLATE 2. Village scenes. *a*, The village, viewed from a nearby hill. *b*, Village store. *c*, Part of principal street, the cemetery in distance. *d*, *Botequim*: (left to right) customer, village official, owner. *e*, Square (*Praça da Matriz*), with church in background. *f*, Carrying home purchases from a village store.



PLATE 3. — **Persons, physical types.** *a*, Village leader, of Indian and African origin. *b, c*, Village officials, each of Indian and European origin. *d*, A *branco*, formerly driver of a pack train. *e*, Negro. *f*, Mixed-blood, of Indian, African, and European origin.



PLATE 4. Persons. *a*, Two farm families, in Sunday dress. *b*, Farm boy. *c*, Farm girl. *d*, Four generations. *e*, Village girls; mother of blond girl (center) is dark mulatto.



PLATE 5.—Persons. *a*, Village boys, indicating interracial fraternity. *b*, Girl of Indian-European descent. *c*, Village boy, a bit *desconfiado* (see section on *Caipira* versus "*Cidadão*"). *d*, Children at door of village home. *e*, *f*, Local men, showing characteristic postures. *g*, School children, with teachers.



a



b



c



d



e



f



g



h

PLATE 6.—House types and construction. a, House, made of *pau a pique*, or puddled earth spread over structure of poles and sticks; roof is of *sape*, a coarse grass. b, House of brick, held together with dried mud, with tile roof. c, Brick house covered with *reboque* (a kind of plaster) and calcimined in pink, with white trimming. d, Large farm dwelling, known as "The Casa Grande"; walls are of *taipa*, or tamped earth, about 2 feet thick; roof is of tile. e, Three houses with a common front and roof; windows and doors are of unpainted boards. f, Framework of a *pau a pique* house. g, Covering framework of f with puddled earth. h, *Pau a pique* wall after drying.

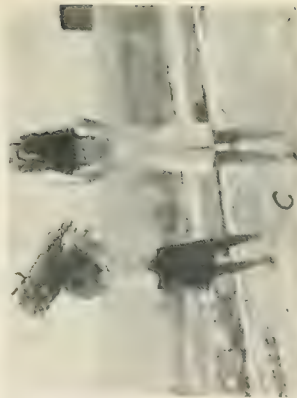
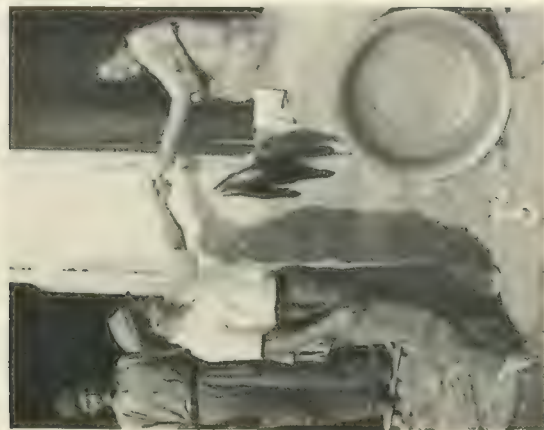


PLATE 7.—Occupations. *a*, Hunting (game is a small deer). *b*, Fishing. *c*, Bringing in firewood. *d*, Washing clothes at the creek. *e*, Washing clothes at a *tanque* in the back yard. *f*, Carrying water in gasoline tin. *g*, Taking care of little sister.

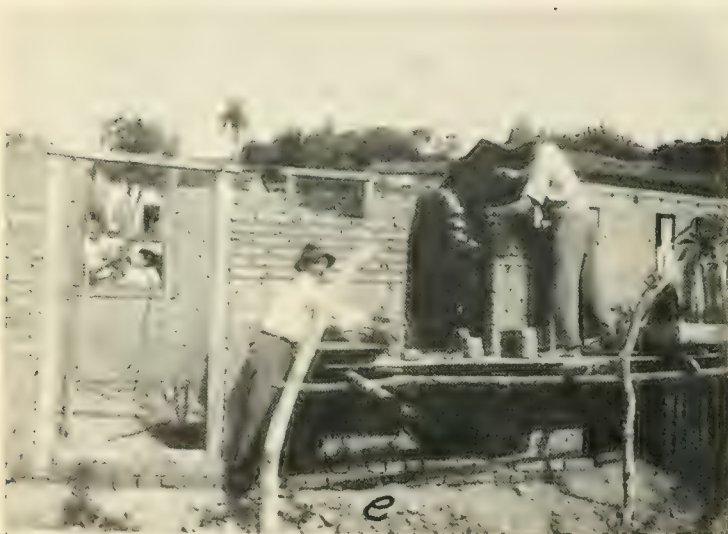


PLATE 8.—Occupations. *a*, Roasting meat in the *forno*; to the left of the woman, rolls of tobacco, pestle, and *pilão*. *b*, Molding brick. *c*, Building a *caieira* to make charcoal. *d*, *Olaria*; in the background the kiln; to the left, bricks piled for drying. *e*, Laying brick. *f*, Keeping store.

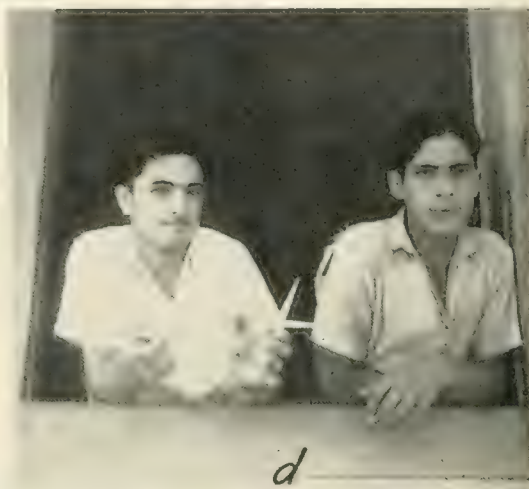


PLATE 9.—**Specialists.** *a*, Village bell ringer. *b*, Midwife (left). *c*, *Benzedeira*, or “blesser.” *d*, Part-time barber, with friend. *e*, Basket maker, with *covo*, or fish trap. *f*, Learning to be a tinsmith. *g*, Village gravedigger.



PLATE 10.—Agriculture. *a*, Clearing the land. *b*, Firewood piled for hauling. *c*, Brush burnt off previous to planting. *d*, Hoe cultivation. *e*, Maize on fertile land. *f*, Maize on a hillside.

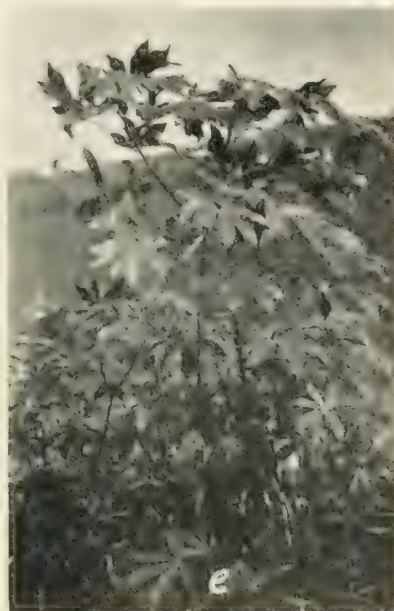


PLATE 11.—Agriculture. *a*, Beans growing. *b*, Beans harvested. *c*, Beans being threshed. *d*, Upland rice. *e*, Manioc. *f*, Bananas. *g*, Tobacco. *h*, Onions (in *restes*). *i*, A *valo* to mark boundary of agricultural property.

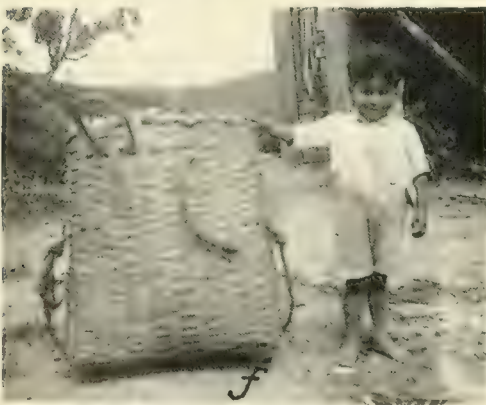


PLATE 12.—Basketry. *a*, Splitting off strips of *taquara*. *b*, Pounding strips with mallet to make them more pliable. *c*, Beginning the basket. *d*, Weaving the sides. *e*, The *tipiti*, made of *sapé* and used for squeezing excess juice out of citron pulp when making *cidrão* (see section on Sugar making). *f*, *Jacá*, or large basket used for transport. *g*, *Jacás* on mule.

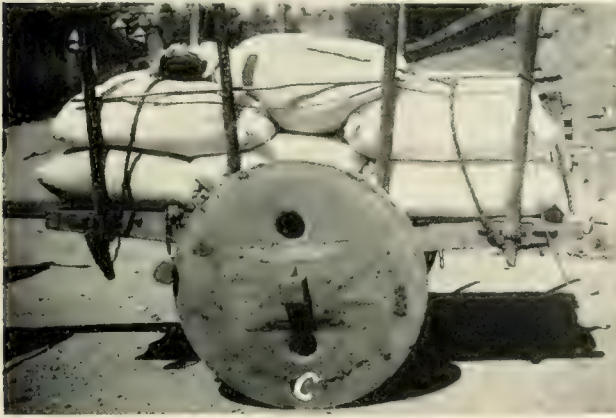


PLATE 13.—Transportation. *a*, Oxen with oxcart. *b*, *Taquara* matting on oxcart. *c*, Oxcart with wooden wheels and wooden axle. *d*, *Charrete*, or cart for carrying people. *e*, *Carroça*, or cart for carrying produce. *f*, *Carrinho*, for transporting light objects.



a



b



c



f



e

PLATE 14.—**Transportation.** *a*, Family walking and riding in to Mass. *b*, *Caçamba*, for hauling dirt. *c*, Carrying baby brother; technique taken over from Japanese immigrants. *d*, Pack saddle. *e*, The new bus. *f*, Carrying water in a *moringa*.

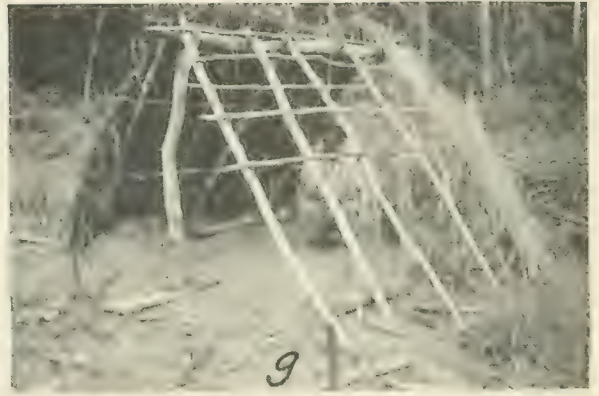


PLATE 15.—Tools and equipment. *a*, *Engenho* for pressing cane; cogs are of iron. *b*, *Engenho* with wooden cogs (woman is of Indian-white ancestry). *c*, Wooden water wheel at mill for grinding maize. *d*, Plow used locally. *e*, Wooden gate, made without nails. *f*, *Rancho*, or crude shelter erected in a field. *g*, Shelter for charcoal maker.



PLATE 16.—Churches and chapels. *a*, Village church, with (left) two *musters*. *b*, Chapel originally built in seventeenth century and recently restored. *c*, Image of São Benedito, a Negro saint, with the Infant Jesus. *d*, Interior of chapel located in countryside near the river. *e*, Figures in chapel, referred to locally as "Adam" and "Eve." *f*, Door of village church. *g*, Wayside chapel, with cross.



PLATE 17.—Ritual, ceremony, and belief. *a*, Procession. *b*, *Padre* under canopy in procession. *c*, Image of *Nossa Senhora da Piedade*, patron saint of the village, being carried in procession. *d*, *Leiloeiro*, or auctioneer at church festas, selling *prendas*, or donations of parishioners. *e*, *Mastro*, with banner of Santo Antonio, set up at farmhouse. *f*, Wayside cross. *g*, *Evangelistas*, or members of Protestant sect, kneeling in prayer. *h*, Baptismal ceremony, *Evangelista* sect.



PLATE 18.—Marriage, baptism, and burial. *a*, Bride and groom at marriage ceremony. *b*, Another bride and groom at church on a rainy day. *c*, Bride and groom leaving village for farm after wedding ceremony, accompanied by relatives and friends. *d*, Funeral procession, led by village *padre* and assistant. *e*, Family and friends with child, following baptismal ceremony. *f*, Friends throwing dirt on coffin of deceased. *g*, Cemetery.

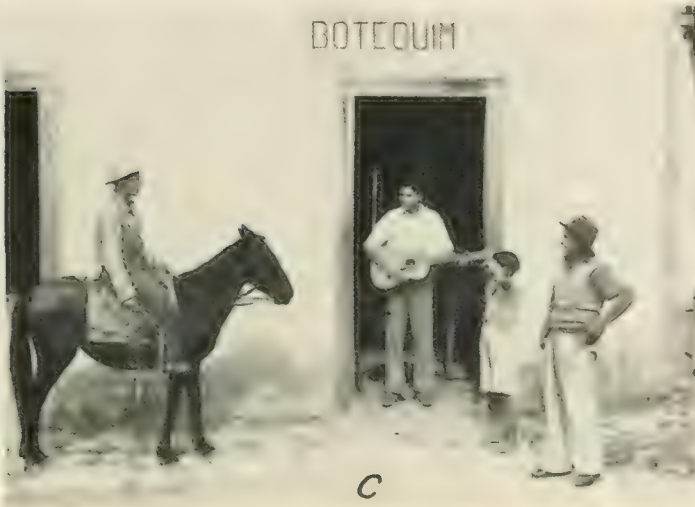


PLATE 19.—Leisure time activities. *a*, Conversing with friends on a Sunday afternoon. *b*, Village band. *c*, Group of friends, with *violão*, at *botequim*. *d*, Setting off of fireworks (*bateria*). *e*, Preparing a *churrasco*; sauce made of wine, salt, pepper, and onions is being sprinkled over meat. *f*, Smoking a *pito*, or pipe.

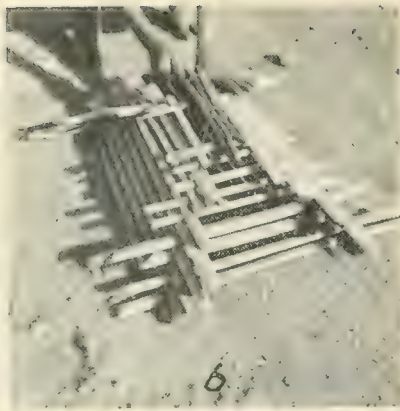
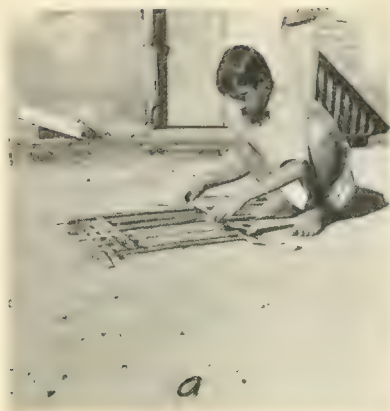


PLATE 20. Miscellaneous scenes. *a*, Building an *arapuca*, or trap for catching game birds and small animals (boy is sitting *de cócoras*). *b*, Completed *arapuca*. *c*, *Arapuca* set up in cleared spot in timber. *d*, Crib, made of *taquara*, and hung from kitchen rafters. *e*, *Paiol*, used for storing produce, especially in dry weather; sides are of *taquara*, roof is of *sapé*. *f*, Bathtub, carved from *cedro*, a local species of cedar. *g*, Zebu bull. *h*, "Ant hill," made by termites. *i*, Ox skull, placed in field to protect growing crops from the evil eye.

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